ANNUAL REPORT

ON THE

HEALTH

OF THE

CITY OF SHEFFIELD

1970

CLIFFORD H. SHAW, M.D., D.P.H., D.P.A.
Medical Officer of Health

ANNUAL REPORT

ON THE

HEALTH

OF THE

CITY OF SHEFFIELD

1970

CLIFFORD H. SHAW, M.D., D.P.H., D.P.A.
Medical Officer of Health

PRINCIPAL CONTENTS

APPENDIX

VITAL STATISTICS

PERSONAL HEALTH SERVICES

WELFARE SERVICES

ENVIRONMENTAL SERVICES

GENERAL

CITY OF SHEFFIELD

HEALTH AND WELFARE COMMITTEE

as at 31st December, 1970

THE LORD MAYOR
(Alderman SIDNEY DYSON)

Chairman: Alderman Mrs. P. SHEARD, B.A., J.P.

Alderman	G. ARMITAGE	Councillor	Mrs. M. C. P. JACKSON
„	Mrs. W. M. GOLDING	„	Mrs. M. KERTON
„	Mrs. F. ROEBUCK, J.P.	„	W. KIRK, R.M.P.A., R.M.N., S.R.N.
„	Mrs. M. STRAFFORD	„	C. W. KNOWLES
Councillor	W. G. BLAKE	„	M. H. MOORE, Dip.Com.(R.S.A.)
„	F. BROOKES, D.F.C.	„	A. C. P. MORRIS
„	Mrs. C. DODSON	„	J. P. PASHLEY
„	N. ELDRED	„	Mrs. E. RICHARDSON
„	Mrs. J. M. GRINDROD	„	B. WILKINSON
„	F. R. HATTERSLEY		

REPRESENTATIVES ON OTHER BODIES, Etc.

Joint Committee—Welfare of the Blind Department and Royal Sheffield Institution
Councillor Mrs. M. KERTON

North Eastern Federation of Members of the Queen's Institute of District Nursing
Councillor C. W. KNOWLES — Councillor M. H. MOORE, Dip.Com.(R.S.A.)

Sheffield and District Clean Air Committee

Alderman	Mrs. P. SHEARD, B.A., J.P.	Councillor	M. H. MOORE, Dip.Com.(R.S.A.)
„	Mrs. W. M. GOLDING	„	C. W. KNOWLES
Councillor	W. G. BLAKE		

REPRESENTATIVES OF LOCAL HEALTH AUTHORITY ON OTHER BODIES

National Health Service Act, 1946—Executive Council for the City of Sheffield
Deputy Chairman: Alderman Mrs. P. SHEARD, B.A., J.P.

Alderman	G. ARMITAGE	Councillor	Mrs. J. M. GRINDROD
„	Mrs. W. M. GOLDING	„	C. W. KNOWLES
Councillor	W. G. BLAKE	„	M. H. MOORE, Dip.Com(R.S.A.)
„	Mrs. C. DODSON		

GENERAL STATISTICS

AREA (At 31st December, 1970)	(acres) 45,363
POPULATION—Census 1966 (Sample)	482,540
Estimate of Registrar General—Home population year 1970	525,230
APPROXIMATE NUMBER OF HOUSES (at 31st December, 1970)	188,104
RATEABLE VALUE (1st October, 1970)	£24,184,773
SUM REPRESENTED BY A PENNY RATE (Year 1970-71)	£97,330

EXTRACTS FROM VITAL STATISTICS OF THE YEAR 1970

LIVE BIRTHS—

	Males	Females	Total		
Legitimate	3.914	3,568	7,482		
Illegitimate	360	372	732	Birth Rate *per* 1,000 *of population*	15·6
Totals	4,274	3,940	8,214		
Illegitimate live births per cent. of total live births					9·0
STILLBIRTHS	56	46	102	Rate *per* 1,000 *total (live and still) births*	12·0
TOTAL LIVE AND STILL BIRTHS	4,330	3,986	8,316		

DEATHS OF INFANTS UNDER ONE YEAR OF AGE—

All Infants	Deaths 162	Rate *per* 1,000 *live births*	20·0
Legitimate Infants	Deaths 145	Rate *per* 1,000 *legitimate live births*	19·0
Illegitimate Infants	Deaths 17	Rate *per* 1,000 *illegitimate live births*	23·0
Neonatal Mortality (first four weeks)	Deaths 98	Rate *per* 1,000 *live births*	12·0
Early Neonatal Mortality (under 1 week)	Deaths 85	Rate *per* 1,000 *live births*	10·0
Perinatal Mortality (stillbirths and deaths under 1 week)	Deaths 187	Rate *per* 1,000 *total (live and still) births*	22·0

MATERNAL MORTALITY

Puerperal Sepis and Abortion	Deaths —	Rate *per* 1,000 *total (live and still) births*	—
Other Maternal Mortality	Deaths —		—
Total Maternal Mortality	Deaths —		—

	Males	Females	Total		
DEATHS (All Causes)	3,381	3,085	6,466	Death Rate *per* 1,000 *of population*	12·3

DEATHS FROM CERTAIN CAUSES—

Tuberculosis of Respiratory System	Deaths 13	Rate *per* 1,000 *of population*	0·02
Other Forms of Tuberculosis	Deaths 6		0·01
Cancer	Deaths 1,368	Rate *per* 1,000 *of population*	2·60

CITY OF SHEFFIELD

Telephone No. 26444

Public Health Department,
Town Hall Chambers,
S1 1EN

To the Chairman and Members of the Health Committee

1970 closed in a hubbub of expectancy as many of the staff were pitched into the turmoil of a major reorganisation, their hopes and fears on the brink of resolution. While the Social Services Department did not come into being until 1st April, 1971, the pace of change was already quickening. In particular the Chronically Sick and Disabled Persons Act provided an impetus for the development of welfare services for the handicapped, which were destined for transfer with the social psychiatry service, the home help and home warden service, the mother and baby home, the day nurseries and the supervision of playgroups and child-minders. Whatever the relative merits of 'medical' or 'social' direction, these changes foreshadow the eventual integration of the remaining local health services with the general practitioner and hospital services.

It may be helpful to sketch out the evolution of the services that are now designated 'social'. A 'home helps' service started in Sheffield at the beginning of 1945 and within the National Health Service was to become an important social prop in buttressing the lives of the old and infirm. In contrast the day nursery service was to languish, being run down from the wartime level of 17 nurseries established in 1942 and 1943, and the only prefabricated nurseries which survive are at Darnall, Firth Park and Meersbrook. Beet Street nursery was built in 1938 by a voluntary body and handed over to the Health Committee in 1942, while Carbrook nursery was opened in 1950 to replace a nursery in a requisitioned building. The mother and baby home was established in 1953 in a house in Hucklow Road, which had formerly been a Children's Home.

The introduction of the National Health Service was seen in Sheffield as the opportunity to unify services under the Lunacy and Mental Treatment Acts which had previously been the responsibility of the Social Welfare Committee, with those under the Mental Deficiency Acts, which until 1946 had been provided by a sub-committee of the Health Committee but administered through the Town Clerk's Department. In 1938 an 'occupational centre' had been housed in what had been derelict premises in Pitsmoor, and it was not until 1954 that a further centre was provided at 'The Towers', a converted mansion: the first purpose-designed 'junior training centre' was established at Norfolk Park in 1963, a second centre being opened in 1969—both these were to be transferred to the Education Committee on 1st April, 1971.

The welfare services for the blind, which had developed in the 1920's under another sub-committee of the Health Committee did not, however, become the responsibility of the Medical Officer of Health until 1948, and it was not until 1952 that a faltering start was made with services for the physically handicapped. The first day centre to be opened was at Manor Clinic, followed in 1954 by the use of a former nursery at Southey, additional centres opening the following year at Swinton Street—another nursery hutment—and at the Sharrow Lane Workshops for the blind. A start had been made on the principle of making do with what was available and, although Firth Park Clinic and some years later the premises in Psalter Lane purchased from the voluntary deaf association were brought into use, the first building made to measure was Kelvin Welfare Centre which was not opened until January, 1970. The latest addition to the family was the 'medical assessment centre' provided for the old and infirm on the ground floor of the Johnson Memorial Home and some patients were admitted in November.

For many years day nurseries and nursery schools have existed in a sort of limbo, as they were perennially low on the list of national priorities. Day nurseries in particular are costly to run because they are open, in Sheffield for example, from 7.30 a.m. to 6.0 p.m. with a corresponding increase in the staff necessary to ensure adequate care 'round the clock'. Even during the war it became apparent that, while they released

mothers, to industry, other women must be employed to take over the mother's responsibility for the care of her children. Increasingly priority has been given to 'unsupported' mothers including of course young widows and wives who were separated from their husbands. Of recent years the nursery service has been recognised as having a continuing part to play in the structure of Society. Having pleaded unsuccessfully for a number of years to make a start in replacing the prefabricated wartime nurseries, I am glad to see that the 'warriors of Whitehall' have relented and that the Social Services Department will be building not only a replacement for Meersbrook Nursery, but a day nursery at Pitsmoor under the Urban Programme. Although meeting a rather different purpose, the growth of the playgroup movement has been most encouraging and it is noted that at the end of 1970 there were 83 playgroups with 4,000 children. On the other hand there were only 118 registered child-minders and, accepting there may be a number of unregistered women, I think that probably my successor will find ways and means of increasing the number of women prepared to care for children whose mothers are at work—indeed in the early months of 1971 a tentative start was made under the third phase of the Urban Programme, when a number of subsidised placements were made with child-minders.

On p. 66 Dr. Wright has summarised the latest findings in her research which she has undertaken over a period of some 16 years. Her studies have been written up more fully and will be appearing shortly in the medical press. It may be recalled that a few years ago the Health Committee assisted in research on problem families through the appointment of a social worker who was seconded to work with a consultant psychiatrist at Whiteley Wood Clinic. The health visitor in her normal work will encounter families which present special problems and a number of these will fall into the group which, for want of a better name, has often been classed as 'problem families'. However, where more specialised or intensive case work is necessary this will, in future, be undertaken by social workers within the framework of the Social Services Department. This is a province in which none could dispute the rightfulness of the social worker's place, but various avenues of approach have been pioneered, even if the results show the intractability inherent in many of the family situations.

The term 'warden' is used somewhat loosely but the home wardens in Sheffield have provided a most valuable service to the old and infirm. Although experiencing difficulties in recruitment in many areas of the City, the concept of pairing wardens should help to make the job less onerous, although it will still only appeal to a minority of women who are free to give up regular evenings to the work. Although a majority of local authority staff enjoy a '9-5' routine it should be borne in mind that there are many involved in the health and social services who, if the enfeebled are to be given the material support needed, will have to work in the evenings and at weekends and during public holidays.

The number of incontinence pads issued continues to mount steadily each year and is an index of the rising tide of old people in their homes whose hold on life is precarious. The home nursing service in Sheffield has established a high reputation through its evening visiting where calls are regularly made up to 10.0 p.m. In addition the night nursing service, which was introduced in 1967, expanded further so that 25 auxiliaries are available to sit with patients each night, two or three nurses being also on duty and making periodic rounds. This is a very difficult service to administer as the auxiliaries are often placed in different households each night so as to give relief to as many relatives as possible in caring for chronic sick and often dying patients. I am sure that the staff take a pride in surmounting the difficulties, recognising how much the service is appreciated. It is not, however, intended to be an alternative to hospital care, and there is a danger that the existence of such a service may sometimes result in a patient being nursed at home who really required the facilities of a hospital.

Of recent years there has been a good deal of discussion on the attachment of nursing staff to groups of general practitioners. Although there are still difficulties due to patients being widely scattered, undoubtedly this more personal link can operate to the benefit of the patients and usually the staff find the job more satisfying, although

possibly working under greater pressure. Ideally the nurses should be able to use the doctor's surgery as a base, keeping records on the premises and having ready access to a telephone. In some areas this has been achieved and, of course, at a health centre life is made easy, However, the concept of attachment would never have gained momentum if we were only prepared to work in an ideal setting. A silent revolution is taking place among the ranks of the home nurses and nursing auxiliaries who have been banded together in teams, often with a state registered nurse acting as leader and calling in at the doctor's surgery rather than relying on telephone communication through the area office. Good progress has also been made in matching doctors and midwives, particularly where the general practitioner works in the unit at Nether Edge Hospital. Midwives are abandoning the concept of running ante-natal clinics in isolation but are often undertaking these at the doctor's surgery. Steady progress has been made too with the attachment of health visitors but heavy caseloads in some areas make it difficult to enlarge the scope of the work without neglecting the welfare of young children and old people. For many years social workers have also been closely involved with deprived children and old people, particularly where they had applied for residential accommodation, and it is appreciated that the service they are able to offer will increasingly encroach on the province of the health visitor. Eventually some re-definition will be necessary as to the role among the aged of these two groups of workers whose professional background is, of course, very different. At present both social workers and health visitors are thin on the ground and a constructive approach to their work is often swamped by the immensity of the task.

The G.P. Unit at Nether Edge Hospital, although not running to capacity, seems to have encouraged the acceptance of early discharge following confinement, and consequently a greater number of babies were born in ordinary hospital beds. Admittedly the birth rate had fallen, but the increase in institutional confinements rose somewhat dramatically from 79·7% in 1969 to 88·4%. At this level of domiciliary births it would be difficult to provide an efficient midwifery service in isolation from the hospitals, but the fact that many domiciliary midwives now conduct deliveries in the G.P. Unit has helped to restore the balance between midwifery and those nursing tasks following delivery which do not require the full skills of a qualified midwife.

There is still a need for the more ready availability of family planning advice, particularly in the post-natal period, but the local authority clinics have continued to expand, and generally are able to offer a service in the district in which the patients live. By the end of 1970, 28 sessions were being allocated each week at 17 clinic centres, at which 2,390 new cases were seen, compared with 1,967 (1969), 1,379 (1968), and 536 in 1967 when the National Health Service (Family Planning) Act enabled local authorities for the first time to provide an unrestricted service.

I sometimes feel that it is good to hold fast to established names such as child welfare, and hasten slowly in accepting that everything that is not 'Seebohm' should suddenly be called 'health'. Nevertheless it is right that we should recognise that the aims and practices at these clinics have been changed of recent years and that greater emphasis is placed on the medical assessment of handicapped children, leaving the health visitor with full responsibility within her recognised field of advising mothers on the care of children. Although the phenylketonuria test which has now been undertaken for a number of years is easy to perform, the results are not as reliable, nor available as early as is possible with the Guthrie test, which depends on analysing blood, usually taken by midwives on the sixth day after birth. From February, the Guthrie test was introduced in accordance with a scheme agreed with the Sheffield Regional Hospital Board, the analysis being undertaken spectroscopically at the M.R.C. laboratories at Middlewood Hospital.

During 1969 and 1970 a number of organisation and method surveys were undertaken in various sections of the department. Although to some extent these are interrelated, the main recommendations to date have involved the National Health Service administration based at the Orchard Place central clinic premises. Following a review of the staffing structure responsibilities have been identified more precisely, and staff

reductions have been possible, although not always to the extent that had been hoped. For several years it has not been possible to provide office accommodation for the vaccination and immunisation section, except as an isolated detachment, but with a reduction of staff and a condensation of space necessary for records it has been possible to house it on an upper floor of the Orchard Place building.

On p. 22 reference is made to our participation in a trial of British rubella vaccine which was given at school during the summer term. As events transpired American vaccine was distributed on a national basis in the Autumn but it was possible to show that the British vaccine also gave good results, even if our young ladies have shed a drop or two of blood in aid of science. I have high hopes that the practice of rubella vaccination for adolescent girls will become generally accepted and that it will be offered as a routine at the age of eleven.

The measles vaccination campaign launched in November proved to be a damp squib. If sufficient vaccine had been available, it would probably have been better to have capitalised on the situation earlier in the year when measles was prevalent and the illness was in the forefront of parents' minds. Protection, however, takes time to develop and the vaccine might well have been blamed for attacks of natural measles which were already on their way. Vaccine has been used at a steady rate throughout 1971, although the acceptance rate would probably be better if we aimed to offer the vaccine as soon as possible after the first birthday.

Smallpox vaccination has always been the least popular form of protection and many will welcome the advice in July, 1971 by the Joint Committee on Vaccination and Immunisation that routine vaccination in infancy should be discontinued owing to the slight, but not negligible, risk of encephalitis. Frankly this is a gamble for smallpox is still prevalent in the Eastern hemisphere and Africa, and the W.H.O. schemes for eradication may well not achieve the success hoped for. While it is possible to defer vaccination and offer protection at school entry if these hopes are not fulfilled, 'stop-go' is a policy of last resort.

Although the known reservoirs of chronic infectious tuberculosis have fallen from 69 in 1963 to eight in 1970, notifications of non-pulmonary tuberculosis remain obstinately high, which is rather remarkable since milk is no longer a source of infection. Perhaps greater attention should be paid to domestic pets, in particular the dog, an animal which may be infectious, although not apparently ill.

Dr. R. Chapman has given a colourful account of a bevy of infectious diseases, and also focused attention on the problem of epilepsy and driving. I intend that fuller reference will be made in future to community aspects of non-infectious disease. Moreover, we are perhaps hidebound by tradition, for epidemics of vandalism are a symptom of social maladjustment no less than a high incidence of venereal disease or the taking of 'pep' pills. There may well be need for research planned as a study by workers of different disciplines.

The continuing rise in mortality from cancer of the lung is predictable and will probably continue so long as addiction to nicotine is socially acceptable. The failure of health education to dissuade young people from taking up smoking reflects the inadequacy of our methods, and also the complexity of the underlying motives. In this country filter tipped cigarettes now hold the major share of the market and already tobaccos are being developed with a lower tar yield. It is not yet known whether these are less likely to induce cancer, but for the present it is the only wisp of hope.

A special word of thanks is due to Miss D. J. Parker and Messrs. A. J. Baker, A. J. Dean, W. F. Dunne and R. A. Lynn for the final chapters on the social services to appear in these Reports. From time to time 'guest' contributions are invited from colleagues in allied fields, and I am glad to welcome those of Dr. E. H. Gillespie and Dr. P. J. Moroney for close links have been forged with both the Public Health Laboratory and the infectious diseases hospital. Mr. R. Michie and Miss J. Lindley do Trojan work in trying to tie up the many loose ends and checking the statistical details.

Alderman Mrs. P. Sheard was Chairman of the Health Committee from 1958-1968, and of the Health and Welfare Committee from 1969 to the end of 1970. Although she has now relinquished this important responsibility on becoming first Chairman of the Social Services Committee, I have no doubt she will encourage and support Alderman Mrs. M. Strafford in promoting the welfare of the health services.

Medical Officer of Health

September, 1971.

VITAL STATISTICS

"The Promised Land always lies on the other side of a wilderness"
Havelock Ellis (The Dance of Life)

Population—The Registrar General's estimate of the home population as at 30th June, 1970 was 525,230 and it is on this figure that the vital statistics which follow, are calculated. The estimated population for 1969 was 528,860. (The 1971 Census showed the population of Sheffield to be 519,703).

Live Births—Net live births numbered 8,214 giving a birth rate of 15·6 per 1,000 population compared with 16·0 in 1969. The provisional birth rate for England and Wales was 16·0 per 1,000 population. The following table shows the trend of the birth rate in the City during the last ten years, also the illegitimacy rates for Sheffield and England and Wales.

Year		*Total Live Births*	*Birth Rate per 1,000 of population*	*Illegitimate Live Births*	*Illegitimacy Rate per 1,000 Live Births*	
					Sheffield	*England and Wales*
	1960	7,829	15·7	401	51	54
	1961	8,157	16·5	434	53	59
	1962	8,612	17·4	546	63	66
	1963	8,396	17·0	559	67	69
	1964	8,400	17·1	622	74	72
	1965	8,505	17·4	683	80	77
	1966	8,291	17·0	665	80	79
	1967	8,876	17·0	753	85	84
	1968	8,874	16·7	764	86	84
	1969	8,465	16·0	727	90	80
Average	**1960-69**	8,441	16·8	615	73	72
	1970	8,214	15·6	732	89	83

Stillbirths—After adjustment for inward and outward transfers, 102 stillbirths were registered, giving a stillbirth rate of 12·0 per 1,000 total births, compared with the provisional rate of 13·0 for England and Wales. In 1969 the stillbirth rate was 12·0 per 1,000 births.

Infant Mortality—There was an increase in the infant mortality rate. 162 babies died under the age of one year giving a mortality rate of 20·0 as against 17·0 in 1969. Deaths of illegitimate babies showed a definite decrease, the rate being 23·0 per 1,000 illegitimate live births. Fluctuations in the infant mortality rate for legitimate and illegitimate babies are shown in the table which follows; the rate for England and Wales for all infants is given for comparison.

Infant Mortality, Sheffield and England and Wales 1961 to 1970

Year	*Legitimate Infants*	*Illegitimate Infants*	*All Infants*	
	Rate per 1,000 *legitimate live births*	*Rate per* 1,000 *illegitimate live births*	*Rate per* 1,000 *live births*	
			Sheffield	*England and Wales*
1961	23	23	23	21
1962	20	29	20	21
1963	22	23	22	21
1964	17	29	18	20
1965	18	31	19	19
1966	21	17	21	19
1967	19	20	19	18
1968	18	14	18	18
1969	15	36	17	18
1970	19	23	20	18

Neonatal Mortality.—There were 98 deaths of infants in the first four weeks of life resulting in a neonatal mortality rate of 12·0 per 1,000 live births, compared with 11·0 in 1969. The provisional England and Wales rate was 12·0.

Perinatal Mortality.—Stillbirths and deaths of infants under one week totalled 187 the perinatal mortality rate being 22·0 per 1,000 total births, compared with 21·0 in the previous year. The provisional England and Wales rate was 23·0 per 1,000.

Maternal Mortality.—There were no maternal deaths during the year.

Deaths.—During the year 7,109 deaths were registered and after adjustment for inward and outward transfers the net total was 6,466. The death rate from all causes was 12·3 per 1,000 population as compared with a rate of 12·6 per 1,000 in 1969. Of the total net deaths, 70·2% were of persons aged 65 years and over. The provisional England and Wales death rate for 1970 was 11·7 per 1,000 population.

A table showing the population, births and deaths rates for Sheffield and for England and Wales in 1970 and previous years is given in the appendix, page 117.

Deaths of Sheffield residents by age groups for the decade 1961—1970 are shown below:—

Deaths by Separate Age Groups, 1961-1970

Age	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Under 1 year	191	174	185	147	158	174	170	160	140	162
1—4	23	27	46	24	27	29	24	25	21	14
5—14	23	30	30	18	17	31	27	22	22	17
15—24	44	45	48	57	40	39	46	37	45	47
25—44	228	235	220	214	192	181	173	181	208	163
45—64	1,598	1,604	1,529	1,554	1,447	1,473	1,488	1,605	1,592	1,516
65—74	1,757	1,659	1,660	1,617	1,631	1,654	1,553	1,777	1,862	1,831
75 and over	2,613	2,508	2,538	2,384	2,417	2,589	2,487	2,862	2,776	2,715
TOTALS	6,477	6,282	6,256	6,015	5,929	6,170	5,968	6,669	6,666	6,465

Causes of Death.—Deaths of Sheffield residents, classified according to disease, sex and age groups are given in the appendix, page 118.

Marriages.—There were 4,264 marriages during the year, the marriage rate remaining at 16·2 (persons married per 1,000 population).

Cremations.—There was again an increase in the number of cremations carried out at the City Road Crematorium. These totalled 4,758 as against 4,599 in 1969. In each case the documents were examined by the Medical Officer of Health or his Deputy who are accepted referees for this purpose.

Notification of Infectious Diseases.—The following table shows the number of cases of each of the notifiable diseases by age groups:—

Cases of Infectious and other Notifiable Diseases During the Year 1970 by Age Groups

NOTIFIABLE DISEASE	*Number of Cases Notified*								
	At Specified Age Periods								
	Under 1 year	*1 and under 5*	*5 and under 15*	*15 and under 25*	*25 and under 35*	*35 and under 45*	*45 and under 65*	*65 and upwards*	*At all Ages*
Smallpox	—	—	—	—	—	—	—	—	—
Measles	273	3,319	1,691	21	5	—	—	—	5,309
Whooping cough	55	202	184	5	—	2	—	—	448
Scarlet fever	1	67	124	7	2	—	—	—	201
Infective jaundice	—	9	49	29	9	10	9	5	120
Diphtheria	—	—	—	—	—	—	—	—	—
Typhoid fever	—	—	—	1	—	—	—	—	1
Paratyphoid fever	—	—	—	—	—	1	—	—	1
Acute meningitis	3	4	12	7	2	3	2	1	34
Acute poliomyelitis—									
Paralytic	—	—	—	—	—	—	—	—	—
Non-paralytic	—	—	—	—	—	—	—	—	—
Ophthalmia neonatorum ...	1	—	—	—	—	—	—	—	1
Malaria	—	—	—	—	—	—	—	—	—
Dysentery	13	74	92	13	32	10	9	10	253
Acute encephalitis—									
Infective	—	—	—	—	—	—	—	—	—
Post-infectious	—	—	2	—	—	—	—	—	2
Food poisoning	3	7	6	7	7	3	16	5	54
Tuberculosis of respiratory system	—	1	1	12	11	18	29	24	96
Other forms	—	3	4	7	9	5	4	8	40
TOTALS	349	3,686	2,165	109	77	52	69	53	6,560

Measles.—Notified cases totalled 5,309 during the year compared with 740 in 1969. There was one death, a nine month old boy with spina bifida.

Scarlet Fever.—There was a decrease in cases notified, 201 being recorded as against 246 in 1969.

Diphtheria.—No cases were notified during 1970.

Whooping Cough.—Cases notified increased to 448 compared with 45 in 1969 and 197 in 1968.

Smallpox.—No cases have been notified since 1947.

Typhoid Fever.—One case was notified during 1970 (see page 18).

Paratyphoid—One case was notified during 1970 (see page 19).

Enteritis and Diarrhoea under two years of age—There were 10 deaths recorded in 1970, the same number as occured in 1969.

Dysentery.—253 cases were notified during 1970. An outbreak in an Infant School is described on page 20.

Food Poisoning.—During the year 54 cases were notified compared with 83 cases in 1969. Fifty-two cases were in the salmonella group and one outbreak of Cl. welchii, details of which follow on page 17, accounted for the remainder.

Leprosy.—Three cases, two male and one female, now remain on the register.

Acute Meningitis.—During the year 34 cases were notified and there were two deaths—a man aged 66 years and a baby boy 5 days old.

Acute Poliomyelitis.—No cases have been reported in the City since 1962.

Acute Encephalitis.—No cases were notified during 1970.

Post Infectious Encephalitis.—Two cases were notified during the year.

Malaria.—No cases were notified during 1970.

Infective Jaundice.—120 cases were notified compared with 244 cases in 1969 and there were four deaths—3 females aged 46, 19 and 5 years and one male aged 62 years (see page 17).

Influenza.—The severe outbreak of influenza at the end of 1969 continued into 1970 and finally petered out during February. 63 deaths occurred during January and February but there were no further deaths certified from this cause during the year. The mortality rate, which was 0·10 in 1969 increased slightly to 0·12 in 1970.

Bronchitis and Emphysema.—There was a considerable decrease in deaths from 455 in 1969 to 358 in 1970, the death rate being 0·68 per 1,000 population compared with 0·86 in 1969. The number of deaths and mortality rate for Sheffield residents during the decade 1960—1969 are given in the following table along with the England and Wales rates for comparison.

	Number of Deaths			*Rate per thousand population*	
Year	*M*	*F*	*Total*	*Sheffield*	*England and Wales*
1960	339	99	438	0·877	0·579
1961	316	156	472	0·954	0·679
1962	360	140	500	1·009	0·713
1963	379	130	509	1·027	0·751
1964	357	134	491	1·000	0·606
1965	336	116	452	0·924	0·619
1966	347	148	495	1·017	0·663
1967	281	108	389	0·744	0·575
1968	336	126	462	0·870	0·643
1969	339	116	455	0·860	Not available

Tuberculosis.—During the year there were 96 primary notifications of tuberculosis of the respiratory system, the incidence rate falling to 0·183 per 1,000 population compared with 0·219 in 1969. Notifications of other forms of tuberculosis increased to 40 giving an incidence rate of 0·076 compared with 0·061 in 1969.

Deaths from tuberculosis of the respiratory system remained at 13, the mortality rate being 0·025 the same as in 1969. Six deaths from other forms of tuberculosis were registered giving a mortality rate of 0·011. (See page 63).

Death Rate per Thousand Population from Tuberculosis 1961-1970

Year	Respiratory Systems		Other Forms		All Forms	
	Sheffield	*England and Wales*	*Sheffield*	*England and Wales*	*Sheffield*	*England and Wales*
1961	0·085	0·065	0·006	0·007	0·091	0·072
1962	0·111	0·059	0·012	0·007	0·123	0·066
1963	0·073	0·056	0·012	0·007	0·085	0·063
1964	0·081	0·047	0·004	0·006	0·085	0·053
1965	0·047	0·042	0·010	0·006	0·057	0·048
1966	0·073	0·043	0·002	0·005	0·076	0·048
1967	0·024	0·037	—	0·005	0·024	0·042
1968	0·033	0·030	—	0·013	0·033	0·043
1969	0·025	0·022	0·006	0·015	0·030	0·037
1970	0·025	0·019	0·011	0·014	0·036	0·033

Cancer.—Total deaths from this cause numbered 1,368; of these 799 were males and 569 were females. The mortality rate from all forms increased slightly to 2·60, the rate for 1969 being 2·52.

Cancer of the lung and bronchus accounted for 429 deaths (365 males and 64 females), the mortality rate being 0·816 compared with 0·787 in 1969. Prevention of cancer of the lung, so well within our compass, would halve the deaths in males due to cancer.

Although the mortality rate increased slightly, it is disturbing to note that whereas deaths from lung cancer remained almost constant for men, deaths amongst women rose from 49 in 1969 to 64 in 1970—an increase of over 23%. Comparisons of the Sheffield and England and Wales rates for the years 1961—1970 follow:—

Cancer of the Lung, Bronchus

Year	Number of Deaths	Rate per thousand population	
	Sheffield	*Sheffield*	*England and Wales*
1961	325	0·657	0·494
1962	326	0·658	0·510
1963	303	0·611	0·519
1964	313	0·637	0·535
1965	340	0·695	0·553
1966	343	0·705	0·562
1967	365	0·698	0·584
1968	398	0·748	0·593
1969	416	0·787	0·610
1970	429	0·816	0·617

INFECTIOUS DISEASES CONTROL

By Roger Chapman, M.B., Ch.B., D.P.H.
Deputy Medical Officer of Health

"*Diseased Nature oftentimes breaks forth in strange eruptions*"
William Shakespeare (Henry IV Part I)

Infective Hepatitis.—The term infective jaundice includes not only infective hepatitis, a condition known locally as 'yellow jaundice' and which constitutes the majority of cases reported, but also a proportion due to other causes, such as the virus responsible for serum hepatitis, leptospirosis, infectious mononucleosis and toxoplasmosis.

Infective jaundice appears to be endemic in our community and it is on the whole a simple benign infection, although like many other mild infectious diseases it will, nevertheless, inevitably cause a small number of deaths every year. A study of cartographs for the notified cases in Sheffield since June 1968, when notification became a statutory requirement, vividly demonstrates the characteristic spread in the community with sporadic cases widely distributed over the whole area of the City but with concentrations in some districts indicative of local flare ups. Most severely affected during the last three years were Frecheville and Woodhouse and, to a lesser degree, the Norfolk Park and Burngreave areas. The cartograph for the year ending June, 1971, shows the apparent complete resolution of cases in the Frecheville and Woodhouse areas. This is due presumably to the build up in that area of a sufficient number of immune persons as a result of the disease or sub clinical infection, and in effect the virus or seed is unable to grow on the barren soil presented by an immune community. Our experience in other infectious conditions leads us to believe that this state of affairs occurs when approximately 70% of the susceptible population becomes immune. Although we appear to be on the brink of identification of the individual viruses responsible for 'the community' and 'hospital' infective jaundice, this desirable state of affairs has not as yet materialised. In consequence the hopes of a vaccine being prepared within the near future are not so high as they were last year. The spread of the infection may be limited by scrupulous attention to personal hygiene, after defaecation, before preparation of food, and by this means perhaps its confinement to the 'household' environment. A major stumbling block in control at the present moment, however, appears to be a persistence of the infection in the school child population. Here there is a curious paradox since the instruction in hygiene in the infant schools would appear to be excellent and yet it is nullified by the immaturity of the subject, and lack of continuity of this discipline in the home. In contrast, the junior school child who constitutes the other major infectious focus is old enough and capable of being taught and retaining the regime but often chooses to ignore or openly rebels against official advice, with the consequence that hepatitis and other 'enteric' infections spread to the adult population. Vaccination rather than education would seem to be our only hope of controlling this irascibility which presents mounting problems in other fields of preventive medicine such as smoking and the taking of drugs.

Food Poisoning Outbreak.—In the middle of June following a complaint from a member of the public, an investigation was made into an outbreak of food poisoning which had affected five out of eight people, who had taken a meal in the form of a buffet lunch at a public house. All five of the people affected had abdominal pains and diarrhoea, which commenced late the same evening or early the following morning, the average incubation period being twelve hours. The menu comprised cold roast beef, cold roast pork, cold boiled ham, cold tinned tongue, sausages, apple pie and custard, and pork pie. The only meat product ingested by all five patients suffering symptoms, surprisingly was the tinned tongue, imported from South America, but four of the five had cold roast beef as well. Two of the three remaining persons who ate this luncheon and had no symptoms did not eat tongue Faecal samples were obtained from all affected persons, and submitted for bacteriological analysis The premises were visited by the Deputy Medical Officer of Health and the Superintendent Public Health Inspector, who interviewed the landlady and three members of the food handling staff. One member of the staff had been attending a general hospital with persistent diarrhoea over the previous nine weeks and stated that investigations to establish the etiology were being carried out and that she was receiving treatment. The main kitchen on these premises was the landlady's domestic kitchen on the first floor, where soup was being prepared and the meat cooked for service on the following day. The kitchen was very well equipped and clean, but rather small and very hot. Various cooked meats were sliced downstairs on a stone table in a

beer cellar which had originally been a foodstore or pantry. The walls were unplastered, lime-washed and covered with black mould and were damp; the ceiling was badly defective and the floor was stone flagged—the whole place was quite unsuitable for this type of work. All meats were sliced by a member of staff who handled the joint and each slice of meat. The landlady was warned that this practice of slicing in apalling conditions must cease forthwith. Representatives of the brewery present the following day at a second interview were advised of the facilities that were essential for this type of food preparation and also the precautions that should be observed by the staff. Stress was laid on the use of tongs rather than fingers for handling food, together with sterilisation of slicing knives, provision of adequate working facilities and the need to choose smaller joints. Meat requires adequate cooking and, if not served hot, should be cooled and then placed in a refrigerator. All these recommendations were carried out by the brewery within fourteen days. Faecal samples were taken from the five patients with symptoms and all food handlers, and while the majority yielded a profuse growth of haemolytic clostridium welchii type 3, one sample grew another type. There had been no remnants of the responsible meal available either in refrigerators or dustbins, but the isolation of more than one type of clostridium welchii suggested that more than one joint was infected. The hospital responsible for investigation of the member of staff suffering with intermittent diarrhoea informed the Department that she had been thoroughly screened and this was of non-infective origin.

It is of interest to note that when discussing these cases with their respective general practitioners, one doctor remarked about similar symptoms he had experienced approximately fourteen hours after eating at this establishment a week prior to the outbreak. This small point is mentioned merely to illustrate the gross under-reporting of food poisoning and dysentery which occurs, and and which is in part responsible for the difficulties encountered in controlling this type of infection and of locating the source of infection.

Epidemic Vomiting.—In early October a sudden outbreak characterised by headache, vomiting, pyrexia and in many cases diarrhoea, was reported by a school medical officer. The pattern was explosive, affecting 50 pupils and two staff out of a total of 340 pupils and 12 staff. The illness lasted approximately 24 hours, with a further 24 hour recovery period after which the children appeared fully fit.

The attacks initially occurred in the junior school, but three to four days later a few cases were reported in the infant section of the school, and in the nearby comprehensive school. Samples of vomit and faeces submitted to the laboratory for examination proved negative for all bacterial pathogens, except in one case, and as a precautionary but extemporary measure it was agreed that all the affected children should be excluded from school for one week. To effect this a letter was sent to all parents explaining the need for this precaution.

This outbreak was typical of a condition sometimes labelled winter vomiting which is almost certainly of viral origin. Virological studies were carried out on a representative sample but proved negative. In all the children, recovery was complete without complications and the time lost from school was limited to the exclusion period. One faecal sample from a pupil grew salmonella and follow-up specimens from the family showed his mother and sister to be symptomless carriers of the same organism.

Typhoid.—A single case reported during 1970, illustrates a typical manner in which typhoid fever can present if inadequately treated.

On the 27th August a young man aged 22 years who had spent the previous year in Australia and returned home to Sheffield one week previously was referred to the Department by his general practitioner. He had presented himself at his doctor's surgery with a document stating that he had suffered from typhoid fever while in Kabul on his way home. His return journey was unusual in that he had hitch-hiked back via Malaysia, India, Nepal, Pakistan, Afghanistan, Iran, Turkey, Greece, Yugoslavia and Germany. He left Australia by boat on the 5th May, 1970 to Singapore where he landed two days later and continued by train to Bangkok. On the 12th May he flew to Calcutta and from Calcutta he journeyed by train to Katmandu, Nepal where he arrived on the 15th May. He stayed there until the 8th June and then travelled to New Delhi by train via Patna, arriving in Delhi on the 11th June, After two weeks in Delhi, he left by train on the 22nd June to Sringar, Kashmir via Pathankot. He first fell ill on the 28th June, while in Kashmir. His symptoms at that time were a retrosternal soreness and cough, anorexia, insomnia, lassitude and dizziness which gradually worsened. After five or six days he developed diarrhoea which persisted for approximately three weeks. In spite of his illness he travelled to Lahore, straight through Pakistan to Peshawar and his condition deteriorated en route. On arrival in Kabul he visited a chemist who gave him a course of parenteral vitamin B12, and needless to say there was no improvement in his condition. On the 5th July, he visited the American Hospital where he was unable to gain admission, and was referred to the Kabul Abke Khan Hospital where he was admitted as a case of typhoid fever. There he received two daily injections of glucose intravenously and a single black and yellow capsule which he thought was an antibiotic after each meal. He was discharged six days later on the 11th July, although still feeling unwell and carried on his journey to Herat on the Afghanistan border

where he met a German medical student. The student gave him some more antibiotic tablets (large yellow capsules) he took one of these per day till they were exhausted. He then travelled through Iran to Tehran and arrived there on the 20th July, but during his stay in Tehran he received a booster dose of typhoid vaccine and, when first seen back home, had a certificate confirming this. He travelled through Turkey by bus to Istanbul, and by train through Greece to Salonika, where he arrived on the 30th July. He hitch-hiked from there to Skopje in Yugoslavia arriving there a day later on the 31st July. In Skopje he met another German boy and travelled with him to Munich. He arrived there on August 4th, and he stayed at the home of this young man for several days. After leaving this friend he hitch-hiked to Amsterdam where he arrived on the 15th August, then to the Hook of Holland arriving on the 19th August where he met and befriended a young student from Liverpool. Together they caught the boat-train to London and hitch-hiked up the M1 from London, staying only once for a meal and toileting on the M1 at the service station which preceded the Birmingham access point. He arrived at his home in Sheffield on the 20th August and reported to his general practitioner informing him of this illness and of the diagnosis. He was referred by the Medical Officer of Health to the Public Health Laboratory, where a blood sample was taken, which yielded a growth of a presumptive Salmonella typhi, and this in turn was referred for confirmation to Collindale reference laboratories. He volunteered no symptoms at that time. In view of this finding and the history of intermittent and probably inadequate treatment he was visited by the Deputy Medical Officer of Health on Thursday 4th September and at this time he admitted to some evening shivers and sweats and feelings of lassitude and vague lower abdominal pains. On examination, however, he was apyrexial and physical examination was negative. He agreed to be admitted to the Infectious Diseases Hospital at Lodge Moor for a full investigation. An examination of his stools showed an organism pathologically identical with Salmonella typhi which was later confirmed to be type E1. Contact tracing had been instituted as soon as it was realised he had a positive blood culture, and all contacts were screened by examination of faeces and urine. Intimate contacts had a basal Widal; a detailed history was taken and their general practitioners were informed of the situation.

Prior to his admission to hospital the patient had visited many public houses scattered throughout the Sheffield area and prepared a meal on one occasion for a friend, who fortunately remained free from infection. The man had also attended a christening party where he had sandwiches but did not use the toilet. One of the contacts at the party was a middle aged sub-normal lady resident in one of the local authority hostels. Ten days after the contact, she became ill with diarrhoea and vomiting, and six to seven days later the staff at the hostel and their visitors manifested the same symptoms. The sub-normal patient was admitted to hospital but investigations proved negative, as did those carried out on all the contacts.

The patient received treatment with septrin for two weeks and was later discharged from hospital after yielding six consecutive urine and faeces samples. He will have continued surveillance every month over the next year, with three monthly checks the following year to ensure he is not an intermittent excretor of the organism.

Paratyphoid—On the 8th December, 1970 the Medical Officer of Health was notified of a confirmed case of paratyphoid A infection with a positive blood culture. The patient ,a male Pakistani, aged thirty-eight years, had returned recently from a six months' stay in Kashmir, where his wife and children lived. He had been quite well until leaving Kashmir and had travelled back to England by air, the journey taking two days, and covering the 18th and 19th November, 1970. The route took him through Mirpur Khas to Rawalpindi, and then to Karachi, where he remained a few hours in an hotel and ate in a restaurant there. He flew direct from Karachi to London and made no stops to eat or toilet on the way back to Sheffield. He stated that he had no meals after leaving Karachi or on the plane. He became ill shortly after his return to Sheffield, his main symptoms, at that time, being generalised aching pains, shivers and sweats, general malaise and a cough. He visited his doctor for the first and only time on the 24th November, 1970, when he was given symptomatic treatment and returned home to bed. His movements were severely limited by the general malaise and amounted to a single visit to an engineering firm to enquire after employment. He remained confined to his home for ten days, which is a house in multiple occupation, where he shared accommodation with five other men, and on one day he had prepared food for the rest of the male residents. He was visited there on three occasions by the medical emergency service, when provisional diagnoses of bronchitis, influenza, and finally on the 2nd December, 1970, poly-arthritis were made, and at this stage he was admitted to a general hospital, where he remained four to five days.

There the patient had a persistent pyrexia, and was found to have an enlarged spleen, and a provisional diagnosis of enteric fever was confirmed by a positive blood culture. He was transferred to the Infectious Diseases Unit at Lodge Moor Hospital on the 8th December, 1970, where he was visited by the Deputy Medical Officer of Health and contact tracing was initiated.

Although he spoke very little English, he was quite emphatic that during the time of his illness he had visited no restaurants, or public meeting places, and his only friends in England were his fellow lodgers. As far as could be ascertained he first came to this country in the early 1960s and gave a past history of malaria in 1965 for which he had been admitted to a Chesterfield hospital.

In August, 1970 whilst in Pakistan, he and several friends had suffered from an infective jaundice. At Lodge Moor the patient was treated with septrin and at first was excreting stools which were positive for Salmonella paratyphi A These eventually became negative as did his urine, and he was discharged, after an uneventful illness, but he is still being followed-up and periodically screened to ensure he remains free from infection.

In this case the patient presented in a rather unusual way with a poly-arthritis, and had the additional handicap which might be described as a dilemma of dialect, since his extremely poor command of the English language presented considerable problems in spite of the fact that Pakistani doctors were in attendance at the Infectious Diseases Unit and the services of an interpreter and a Community Relations Officer available.

Outbreak of Sonne Dysentery.—In July dysentery was reported from the Greenhill Infant School. Many of the children had diarrhoea while some vomited—76 were absent during the period of the outbreak, although the condition was only confirmed bacteriologically in a cross section sample of five cases. The school kitchen also supplied the junior school where there was no outbreak, while faecal specimens from the 15 kitchen staff were all negative. The occupation of members of families of all infected children was investigated and surprisingly no less than 14 were found to be food handlers and included the proprietors of a meat pie bakery, fish and chip shop, grocer's and cafe. Fortunately all specimens from those working with food were negative.

Dysentery in this country is almost invariably due to the sonne strain. Although usually not severe, it spreads readily among young children, even where there are excellent sanitary facilities and standards of hygiene are good. Unless scrupulous care is taken to ensure that hands are thoroughly washed after using the W.C., the infection is liable to be passed from hand to mouth, or from the hand of one child to the next. At home the condition may spread to the mother or other members of the family. The public health measures taken depend on circumstances, for example, if there is a possibility that only isolated cases have occurred, more stringent precautions are justified than if it is apparent that infection is already widespread. Outbreaks of dysentery can easily have a nuisance value out of proportion to the seriousness of the condition. On the other hand the readiness with which the condition can spread is a constant reminder of the difficulties in the practical control of diseases conveyed through the gastro-intestinal tract.

Scabies.—Despite concerted action by dermatologists, venereologists, general practitioners and health visitors, the condition, which is caused by a mite (acarus), is no nearer eradication. The mite nestles in the bosom or other skin folds and usually spreads by close personal contact. In order to identify and define this problem and estimate the effect, if any, of preventive measures, general practitioners were asked to report voluntarily the condition either by telephone, letter or on a special form, and indicate whether or not follow-up by a health visitor or treatment at Osgathorpe Disinfecting Station was required. The latter would be necessary where adequate bathing facilities were not available in the houses, or the general practitioner felt in this way he could ensure full treatment of the whole family. Analysis of the figures for 1970 shows that 367 families were notified and the source of referral was 195 from general practitioners, 52 from the School Health Service, 116 from hospital and 4 from other sources. In 1969 instructions for treatment of this condition were made available in Bengali, Arabic and Urdu. Letters drawing attention to the need for full and adequate treatment of this condition after identification were sent to all medical officers in the department, and general practitioners were asked by letter to try and ensure that the whole family receives treatment on the lines recommended by Dr. Sneddon, the Consultant Dermatologist to the United Sheffield Hospitals. These steps were taken to ensure adequate follow-up, surveillance and treatment of the individual infected family as this must be sustained if this distressing and sometimes very embarrassing infestation is to be eradicated.

The cases reported were analysed by postal district, where this could readily be traced, including 220 to which the attention of the Department was drawn during the last six months in 1969.

District	1969 (*July-Dec.*)	1970
1	—	1
2	43	72
3	11	12
4	19	12
5	15	41
6	22	48
7	7	9
8	7	20
9	35	49
10	5	7
11	3	5
12	8	11
13	4	16
14	0	7
TOTAL	179	310

In view of the preventive measures taken the continued high level of cases being reported is most disappointing. While it may in part reflect better reporting, it suggests the persistence of infection, particularly among the indigent sections of our community. All too often the infection is perpetuated by refusal of a senior male in the family unit to submit himself to a full treatment. This is a national problem and 'the itch' received the attention of the Standing Medical Advisory Committee of the Central Health Services Council at the end of the year, who prepared a memorandum on the prevention and social aspect of scabies.

Rabies.—Following the report of two confirmed cases of rabies in dogs recently imported into this country and concern expressed over its spread in canines and other wild life throughout Europe, a committee of enquiry has been set up to investigate the risk of importing rabies into Great Britain and the need to take further action to protect this country against it. Rabies is a serious disease with a high mortality in man, capable of producing great public health problems and involving the country in heavy costs for preventive procedures. There is every reason to believe that the species of mammals susceptible to it will increase in number. The transmission of this condition to man is usually the result of a dog bite, but could well occur from a lick or a cough from a dog, where this type of intimacy is allowed. It has currently reached epizootic proportions in Europe and has been described in foxes, bats and a variety of rodents. Any traveller on the continent should bear this in mind and even trivial bites from such animals should be treated seriously, seeking medical aid and advice immediately. At the same time it is essential that quarantine restrictions should be strictly observed when pets are brought back into this country—since prophylactic vaccination requires intensive follow-up to ensure a satisfactory immunological response. It would appear that the incubation period has not yet been clearly defined and its wide range means that, with the possibility of secondary cases, we cannot be absolutely sure that a particular dog is free from infection. In consequence whenever a patient presents with a dog bite in this country it is essential to ask whether or not the animal has recently been imported. The treatment needs to be given immediately and unfortunately is rather unpleasant, involving a lengthy series of injections and as such constitutes a further reason for our strenuous attempts to keep Britain rabies free.

The Terrapin Saga.—Turtles, tortoises and terrapins have been known to be a source of Salmonella infection in man for many years now, and the following report illustrates the complexities and ramifications which occur when we embark on a simple investigation to establish a source of infection.

In early April, 1970 a young boy living in Lancashire developed gastro-intestinal symptoms and was admitted to hospital following isolation of Salmonella organisms which later proved to be Salmonella paratyphi B. During the course of an investigation into the possible source of the

infection it was established that the boy kept pet terrapins, and the infecting organism was subsequently isolated from these creatures and from the water in which they lived. The suppliers of the terrapins proved to be a Sheffield firm, and the Public Health Department of the district in which the boy lived notified the Medical Officer of Health for Sheffield. The premises of the responsible Sheffield pet dealer were immediately visited by a public health inspector, who determined that the responsible terrapins came from a consignment of 250 received from an importer in Bradford. They were described as of poor quality and most of them had died. but 50 had been sold, 25 to a Lancashire dealer, who in turn had supplied the patient with the infected terrapin. All the remaining reptiles had been sold locally, but unfortunately no record had been kept of the purchasers, or even the area to which they were sold. A sample of sludge and water from the bottom of the tank in which the terrapins had been kept, and which by chance had not been cleaned, was submitted to the Public Health Laboratory and yielded a growth of Salmonella Java (formerly classified as Salmonella paratyphi B Battersea). The source of the terrapins was the upper regions of the Amazon delta, and when in captivity their main diet is Tubifex worms, which are bred in the Thames area in sewage beds, together with meat scraps from the local butchers. Samples of these were taken and submitted for bacteriological analysis, and yielded no pathogens. Water remaining in another small tank, however, yielded a growth of Salmonella Newport. Faecal samples obtained from all the handlers of the pets were negative. A week later at a further visit to the pet dealer's premises, there had been an arrival of a new contingent of Spanish terrapins, who were swimming happy in the same tank, which had, allegedly, now been cleaned out. The proprietor had by this time also reclaimed six of the original batch of terrapins, and one Spanish and one South American variety were submitted for post-mortem examination. The Spanish variety was negative, but the South American yielded a growth of Salmonella Hartford. Water samples again taken from the tank in which the terrapins were currently living, grew Salmonella Newport, Salmonella Java and Salmonella Hartford.

On the 5th May, a further visit was made to the pet shop by the Deputy Medical Officer of Health, a public health inspector and a Consultant Bacteriologist from the Public Health Laboratories. Further samples were taken from the terrapin water tank, and this yet again, yielded a growth of Salmonella Newport. The owner of the shop was informed of these findings and the dangers of possible transmission to the public was explained to him. As a result of this he voluntarily discontinued sale of these reptiles. Adjacent health departments and the other health departments involved, directly or indirectly were notified of these findings. Stimulated by the bacteriological rewards from these reptiles, other faecal samples were taken from Spanish newts, Tegu lizards, tree frogs, clawed frogs, asculpian snakes, rainbow boas, grass snakes and Jones wall lizards. However, the only specimen yielding Salmonellae was from one of the lizards. The proprietor attended a meeting of the Pets Trades Association, and spoke of the dangers of transmission of Salmonella infection by terrapins and the Association in turn agreed to warn their numbers of this danger.

These findings emphasise how important it is that we realise that apparently clean, harmless animals are capable of transmitting a whole variety of enteric diseases, and it cannot be too strongly stressed that children should not be allowed to handle these types of pets except under close supervision by an adult, ensuring their hands are adequately washed after contact. The tank in which they live should never be emptied in a sink used for washing food utensils. If kept as a pet, one person should be responsible for care, and should wash his hands very carefully after handling the turtles or terrapins. A single dish specially designated for its purpose should be used as a container, and other household pets prevented from drinking the water from the turtle dish. These control measures were suggested by Williamson Helston in 1965, and all schools where animals are kept as pets would be well advised to follow these principles. Other persons at risk, of course, are the staff of pet shops.

No history is complete in the investigation of an outbreak of Salmonella infection where there has been no enquiry into the keeping or otherwise of this type of pet. Legislation to ensure recording of the purchaser's name and address, or screening of all new batches of animals coming into the country from a potentially infected source, would greatly facilitate the identification of the responsible pet and help rapid control of spread of infection.

ASPECTS OF PROPHYLAXIS

(I) Rubella Vaccination.—At the end of the summer term a trial of rubella vaccine was carried out on volunteer thirteen year old girls. The vaccine used was prepared from the RA27/3 Plotkin strain which is grown in human diploid cells and therefore has the theoretical advantage that it cannot carry latent viruses of animal source which might have undesirable properties.

A letter was distributed to all parents which simply outlined the need for this type of protection, the format the trial would taken and the aims of vaccination which is principally to protect the progeny of these adolescent girls. Since absolute protection of the child in utero may ultimately prove to be dependent on the level of the antibody titre in the mother's blood, it was decided to offer the vaccine to all thirteen year old school girls, irrespective of their immune status. A clinical diagnosis of german measles can be very difficult and many conditions so labelled have proved in retrospect to be due to glandular fever, measles, echo or coxsackie virus infections. This difficulty and the wide spectrum of severity shown by the infection means that a past history of the condition in itself is unreliable as an indicator of the acquisition of possible or partial immunity, and constitutes further reasons for electing to immunise as many of the girls as possible. In this way we could ensure both the non-protected and also the partially protected child achieves full protection. Since the vaccine is a modified live virus the possibility always exists of infection of a child in the womb of a pregnant mother who was inadvertently vaccinated, and the side effects of this are not yet known. To ensure this danger was kept to a minimum the age of thirteen was selected as being a time when pregnancy was most unlikely, but when good protection could be expected which would persist into the fertile, childbearing age in a similar manner to that following natural infection. As the vaccine was under trial it was important to study the serological response to the vaccination and determine whether a satisfactory level had been achieved. It was therefore necessary to take a small sample of blood from the finger or ear of the individual vaccinee in order to measure the haemagglutination inhibition antibody (HIA) levels before and after vaccination. Since this was a comparatively new vaccine all girls with an allergic diathesis, for example, hay fever, eczema, asthma, and sensitivity to antibiotics were rejected as candidates for vaccination. In all cases, however, a blood sample was taken and the HIA levels were determined so that, even though the child had not been vaccinated, the parents could be informed whether or not their daughter had already acquired a natural immunity from previous natural infections. Those eligible were vaccinated by means of a Ped-O-Jet spray gun and a second finger prick sample of blood was taken after five weeks to determine the expected rise in titre of antibody level.

Out of a total of 2,050 acceptances 1,710 school girls were vaccinated with the rubella vaccine. All the general practitioners were notified prior to this trial and were asked to report any observed reactions to the vaccine.

A satisfactory level of response to the vaccine was achieved in the great majority of a large cohort of thirteen year old school girls. If the taking of a further blood sample at a later date had been possible, it could well have shown an even greater percentage of fourfold increases in titre, which had been anticipated. There were minimal or no local reactions to the vaccine and Ped-O-Jet administration appeared eminently acceptable for the large numbers of teenage vaccinees.

Rubella H.A.I. Antibody Titres Before and After

Subjects	*Total*	*H.A.I. Antibody Titres*						
	No.	1/10	1/20	1/40	1/80	1/160	1/320	1/640
Pre-vaccination	1,297	205	41	73	184	264	308	222
Post-vaccination subjects with pre-vaccination titres 1/10	205	9	13	41	55	45	35	7
Post-vaccination subjects with pre-vaccination titres 1/20	41	—	9	14	5	9	3	1
Post-vaccination subjects with pre-vaccination titres 1/40	73	—	—	31	32	4	6	—

In the autumn the Department of Health and Social Security decided to make rubella vaccine available to general practitioners but the uptake by the doctors was frankly disappointing, despite the fact that blood sampling was no longer involved. In consequence protection was offered later in the year to those school girls who for one reason or another had not been given this at the time of the original trial. At the end of the year a total of 1,720 had been vaccinated successfully against german measles. It is hoped that by affording them this protection none of their children will suffer the terrible consequences of the congenital rubella syndrome, with the possibility of blindness, deafness, heart disease, anaemia or even death.

(II) Measles Vaccination.—A 'Measles Eradication Campaign' was launched, on the 16th November 1970. Every available means of encouraging parents to have their children vaccinated was pursued. Personal letters with enclosed posters were sent to all general practitioners through the Executive Council and they were asked to display the posters and relevant leaflets in their surgeries. All medical and nursing staff were briefed regarding the purpose of the campaign and they in turn were asked to disseminate as much information as possible to parents. All junior schools were circularised and asked to distribute approximately 50,000 special 'measles eradication' information leaflets to parents in order to try and interest all those with susceptible children not yet vaccinated. The campaign was avidly publicised as a result of intensive and sustained efforts by our health education service who designed special posters to be exhibited in schools, clinics, on public transport and Cleansing Department vehicles. Letters and sets of posters were sent to all women's organisations, all listed baby shops throughout the City as well as the City libraries. The Health Education Bulletin made reference to the campaign and the department enjoyed the support of 'The Morning Telegraph' and 'The Star' newspapers, which provided general publicity at the commencement of the campaign and additional 'booster' publicity half-way through. Radio Sheffield too co-operated magnificently with one women's programme broadcast, three broadcasts by the Health Education Organiser and general news cover. Special 'measles sessions' were arranged at Orchard Place Clinic, together with open access to all existing clinics at their normal child welfare times.

The whole campaign lasted over a period of three weeks but at the end of the time only 788 children had been vaccinated. These results were very disappointing but this very moderate response may merely reflect:— the large number of children who had suffered measles earlier in the year; the fact that a routine school measles vaccination programme had recently been completed; apathy or mistaken idea that measles is a childish ailment of little consequence; lack of full acceptance of the need for measles vaccination by some medical practitioners and the impact this attitude has on the families at risk.

In 1970, 5,559 children in the 0 to 4 years group and 1,132 children of school age received vaccination against measles. In this same period 3,592 children under 5 years of age and 1,012 of school age were notified as suffering from measles. The total of 5,304 cases of measles included 273 in the first year of life and 760 in the second year. Health visitors were requested to enquire into the vaccination status of all children under 2 years of age who had been notified as having overt measles and where vaccination had not been carried out, to determine the reasons for parents failing to ensure their child had been protected against our most common infectious disease. The response where this information was available is both interesting and revealing. Of the 1,033 cases notified, 966 records were considered suitable for analysis. Of these, only 396 would possibly have been eligible for vaccination, assuming all practitioners followed the recommended

schedule and protection is limited to a child 15 months and over. Of these, 172 were interviewed and the reasons for non acceptance of the vaccine elicited are listed below.

Reason given for not being vaccinated	*No.*	*Percentage*
1. Intended to but did not get around to it	59	34%
2. Did not believe in measles vaccination	34	20%
3. Was not aware of measles vaccination	28	16%
4. Awaiting vaccination—appointment made	15	9%
5. Recurrent child illnesses	11	6%
6. General practitioner did not approve of vaccine ...	7	4%
7. Medical contra indication (eczema)	8	5%
8. Vaccinated...	7	4%
9. Past history of measles	3	2%
TOTAL ...	172	100%

The parents of the first group of children, which constitutes 34 per cent of the total, suffer from a condition inherited from the last century, namely apathy. The second group, 20 per cent of the total, are probably shackled by a combination of misinformation, ignorance and deficient education. The third group, constituting 16 per cent, would seem to indicate a gross deficiency in our communications and information systems. No assessment can be made in the retrospective enquiry of the intellectual capacity and the social background of these parents. The fact that 456 cases reported fell into the age range 9 months to 15 months might point to a need for more flexibility and reduction of the age of vaccination to one year since children under 2 years are much more susceptible to the effects of any secondary complications. Another approach to the possible containment of this problem would be an intensification of the eradication programme at school entrance and thereby a reduction of the reservoir of infection to which sibs under five years of age are constantly exposed.

Any attempted eradication campaign would probably achieve more success if it were possible to introduce measles vaccination as a routine for susceptibles at school entrance. It must be borne in mind, however, that the success of immunisation programmes increasingly depends on the active participation of the family doctor, and great care is always taken to ensure the parent's wishes are respected where they indicate a preference for vaccination to be carried out by their own general practitioner.

(III) **Diphtheria Immunisation.**—In 1970 no cases were reported but this should not provide any grounds for complacency and the Manchester experience of 1970 serves as a salutary warning. The Chief Medical Officer's report on the State of Public Health for the year 1969 showed that the percentage of children vaccinated by the 31st December, 1969, of children born in 1969 for Sheffield was 69% and for Manchester 51%. These figures reflect the immune status of the community but it would still be a far more satisfactory state of affairs if those of Sheffield could be raised to the level attained by Oxford in 1969 of 90%. This may ultimately be achieved by the use of computer recording and recalling systems.

THE ROLE OF AN INFECTIOUS DISEASES HOSPITAL

By P. J. Moroney, M.B., B.Ch., B.A.O., N.U.I., D.P.H., L.M.
Consultant Physician, Lodge Moor Hospital

"We shall always keep a spare corner . . .
to give passing hospitality to our friends' opinions"

Joseph Joubert

The discovery, synthesis and development of a wide range of antibiotics, antibacterial agents and new vaccines, together with improvements in social welfare, housing and public health have contributed to a dramatic reduction in many infectious diseases, which twenty years ago filled the hospital wards. It would be the height of complacency to believe, however, that complete eradication of all these diseases is imminent and, although the significance of many of the classical notifiable diseases is much reduced, their place has been taken by a new range of infectious illnesses. Some of these present formidable problems, not easy of solution and often endangering life. If hospital admissions can be taken as a reliable indicator of the severity of a particular infection and probably to a lesser degree its incidence in the community, then there appears to have been a marked increase in the salmonelloses, dysenteries and different types of gastro-enteritis such as that caused by pathogenic E.Coli. Associated with these conditions are problems of antibiotic resistance, developing over the years through the misguided administration of antibiotics in subtherapeutic dosage or for an insufficient length of time, often without recourse to any sensitivity tests. Another related problem of which we have only recently become aware is the transfer of resistance of antibiotics from one organism to another, again something which might have been prevented by the more discriminating use of antibiotics. We as hospital physicians have been exorted by the Director of the Sheffield Public Health Laboratory to maintain an aggressive and knowledgeable attack on these diseases until they are eliminated or minimised. This can only be achieved if microbiologists, consultants in infectious diseases and general practitioners, work as a team in close liaison and led by the Medical Officer of Health. It might be appropriate here to mention the procedure followed when dealing with a suspected case of smallpox and which aptly illustrates this liaison. The initial step is taken by the general practitioner of notifying the Medical Officer of Health who, where appropriate, asks for an opinion from the consultant in smallpox. It must be emphasised that the onus for request of this opinion rests with the Medical Officer of Health.

Today an infectious diseases unit is constantly confronted with a multiplicity of diagnostic problems, and is often called upon to act as a screening station differentiating the infectious from the non-infectious case where there is a common presentation. This function was highlighted by the cases of 'infectious jaundice' admitted recently during a small community flare up. The responsibility for the medical treatment and care of a wide spectrum of age groups from infancy to the very elderly, has impressed on the medical staff the need to consider the patient not simply as an individual, but also as a member of a family and, at the same time, of the community the hospital serves. They are becoming more conscious that successful treatment of the patient without relapse does not necessarily begin and end at the hospital gate, but often depends on the quality of care in the community which preceded his admission and that which he will receive after his discharge. To ensure this total care of the patient is maintained at the highest level, close liaison has developed with the Public Health Department and to provide the necessary personal link, the Deputy Medical Officer and myself meet regularly to discuss individual and community health problems. The notification of cases to the Medical Officer of Health serves, of course, as an early warning system to enable him to initiate action designed to minimise the community impact either at family, school or at whole community level. In special cases, such as the short term, chronic or intermittent carriers of infectious diseases, there is always consultation on their management, disposal and control prior to discharge. The decision whether or not to discharge a patient may well hinge on an assessment by the Medical Officer of Health of the patient's home circumstances and the difficulties likely in control of spread of infection

in the community. Two way flow of information is of vital importance in the overall control of communicable diseases. It is essential for instance that the Medical Officer of Health should be notified when an outbreak of an infectious disease occurs within the hospital environment in patients, or hospital staff, in order that he can help identify the source of infection, and advise on its control, prevention and protection of people at special risk. Hospital staff, both medical and non-medical, are also members of the community we serve, and they can be a source of infection capable of initiating an outbreak within the hospital environment or of spreading infection outside into the the community. Liaison and satisfactory communication links established with the Public Health Department over the years have enabled the community and hospital health services to rapidly identify and successfully contain any infection from these sources.

THE PUBLIC HEALTH LABORATORY SERVICE

By E. H. Gillespie, M.B., Ch.B., F.R.C. Path.
Director

"I could never make out what those damned dots meant"
Lord Randolph Churchill

The Sheffield laboratory, a regional laboratory of the Public Health Laboratory Service Board, is situated in the Northern General Hospital. Its function is for the diagnosis and control of infectious disease in the community. It not only serves the local health authority of the City of Sheffield but serves many other local authorities in the area including Chesterfield, Worksop, Rotherham and parts of the West Riding of Yorkshire. In addition to its public health functions the laboratory gives a bacteriological service to most of the hospitals of the Sheffield Regional Hospital Board, as well as acting in a reference capacity for certain tests for the United Sheffield Hospitals. It is used by general practitioners not only in the control of infectious disease but also in the bacteriological investigation of the individual patient.

The permanent consultant medical staff of the laboratory consists of the director, a deputy director and a consultant microbiologist.

Many of the investigations carried out are for the diagnosis of suspected cases of gastro-enteritis, dysentery, enteric fever and food poisoning. The commonest bacteria isolated are *Shigella sonnei*, a cause of dysentery, and salmonellae the causes of many cases of food poisoning and gastro-enteritis. The laboratory works closely with the Health Department in epidemiological investigations into individual cases or outbreaks of food poisoning or allied diseases.

Recently a joint investigation, in co-operation with the maternity and child welfare department, practitioners and the laboratory, into the incidence of whooping cough and the efficacy of whooping cough vaccines has been carried out. A preliminary report was published in the British Medical Journal on 8th November, 1969. A surveillance is still continuing on whooping cough vaccines in Sheffield.

Many samples are received from practitioners, chest clinics and hospitals, for the diagnosis of suspected cases of tuberculosis.

Because German measles may harm the unborn baby in a mother who is infected with the virus, laboratory tests can be carried out on mothers exposed to infection to see if they are immune to the disease, or are suffering from active infection. The virus department is also helping in the control of hepatitis in hospitals and patients, and monitors the virus diseases which are circulating in the community.

The laboratory also carries out the routine bacteriological testing of samples of milk, cream, ice-cream and water from Sheffield and district health authorities.

Although the laboratory is part of a national network, it plays its part in the control of infectious disease at Sheffield and works in very close liaison with the medical officer of health and his staff.

EPILEPSY AND DRIVING

By Roger Chapman, M.B., Ch.B., D.P.H.
Deputy Medical Officer of Health

"No one looks at the blazing sun; all do when it is eclipsed"

Baltasar Gracian

The problem of the 'controlled' epileptic driver should not be considered in isolation, but always bearing in mind many other conditions such as coronary artery disease, cerebrovascular accident, or diabetes, which at present do not necessarily exclude a sufferer from driving but are capable of causing sudden loss of control of a vehicle and not responsive to any suppressive therapy.

For many years the legal position was uncertain but there was a widely held view that driving licences might be issued where epileptics had been free of attacks for five years. However, in 1966, as a result of a High Court ruling it became apparent that the Licensing Authority did not have a discretion to issue a licence if the driver remained under medication. While it might be argued that such a driver might have further attacks if treatment were discontinued, a stricter interpretation of the law inevitably leads to evasion and penalises the responsible citizen. A more liberal outlook was embodied in the Motor Vehicles (Driving Licences) Regulations, 1970.

Regulation 22(2) provides for a driving licence to be granted if the applicant suffering from epilepsy, satisfies the following conditions:—

(*a*) he shall have been free from any epileptic attack whilst awake for at least three years from the date when the licence is to have effect;

(*b*) in the case of an applicant who has had such attacks whilst asleep during that period he shall have been subject to such attacks since before the beginning of that period;

(*c*) the driving of a vehicle by him in pursuance of the licence is not likely to be a source of danger to the public.

The broad intention of this regulation, which came into force on 1st June, 1970, is to allow driving licences to be granted, in suitable cases, to people with epilepsy who on the basis of medical evidence, have been free from attacks for at least three years, with or without treatment, or who have a history of attacks for more than three years which occur only during sleep.

It has been agreed with the Licensing Department in the Town Clerk's office that all applications to the Licensing Department, which indicate that the applicant has suffered (or is suffering) from epilepsy are referred to the Medical Officer of Health who communicates with the general practitioner, and sometimes the specialist, who has been responsible for the care of the applicant. The evidence and information thus obtained is very carefully evaluated and, if necessary, further enquiries made. The Medical Officer of Health submits to the Licensing Authority his opinion of the applicant's suitability to hold a driving licence, which is normally issued for a year with review at the end of this period.

The decision whether or not to grant a licence can be a very difficult one, since the evidence presented in each individual case is sometimes incomplete, lacking in clarity or sufficient detail. In cases where, after consultation, the Medical Officer of Health is unable to arrive at a decision he may refer the documents to a member of the Honorary Advisory Medical Panel. The members of this Panel are six in number, and each member serves several areas of the country. They are consultants specially selected as having had specialist experience in the treatment, care and assessment of epileptics.

During the period 1st June - 31st December, 1970, 23 applications were received from drivers with a history of epilepsy, one of which was withdrawn following an

attack. In 18 of these, issue of a licence was recommended and it was anticipated that in at least two of the cases refused, favourable consideration would be given if the driver was free of attacks for a further period of 12 months. In addition three drivers who had suffered from sudden attacks of disabling giddiness or fainting, not associated with epilepsy, were also considered, and in one case a licence was refused.

CARE OF MOTHERS AND YOUNG CHILDREN
(Maternity and Child Welfare)

By MARION E. JEPSON, B.Sc., M.B., Ch.B., D.C.H., D.P.H.,
Senior (Maternity and Child Welfare) Medical Officer

"Across the fields of yesterday, He sometimes comes to me,
A little lad just back from play— The lad I used to be"

Thomas Samuel Jones (Sometimes)

'Welfare' is a traditional and honoured word in local authority services, although its association, in the minds of many people today, contains a sadly diminishing medical component. When we think of the multiplicity of factors which influence the well-being of the mother and the development of the young child, our interpretation of the word 'Welfare' is so closely bound up with the modern concept of 'Health' that the two become almost interchangeable.

Notification of Births.—In 1970, 10,521 births were notified in Sheffield, of which 10,376 were live births and 145 stillbirths. A proportion of these births relates to women normally resident outside the City, whose confinement took place within the City boundary. The following table shows the number of births taking place in hospital, nursing home and at home, with specific details relating to Sheffield women only.

Notifications of Birth			*Details relating to Sheffield Women*		
			No. of confts.	*Live Births*	*Still Births*
At Home:—					
By private medical practitioners	287		287	286	1
By midwives	546		544	545	1
Unattended	4		4	4	—
		837			
In Nursing Homes		214	113	113	—
In Hospitals:—					
Northern General Maternity Hospital	3,152		2,644	2,651	42
Nether Edge Maternity Hospital	3,560		3,047	3,024	39
Jessop Hospital for Women	2,758		1,541	1,538	19
		9,470			
		10,521	8,180	8,161	102

Where Sheffield women are concerned, over 88% of confinements took place in hospital. Since 1965 the proportion of hospital deliveries has gradually risen, related perhaps in part to the small decline in the number of births, but more specifically to the operation of the early discharge system and, in the last two years, to the increased number of beds available in the new hospital and general practitioner units at Nether Edge.

Year	*Total confinements*	*% Hospital deliveries*
1965	8,745	66·5
1966	8,413	70·0
1967	8,624	71·0
1968	8,801	75·9
1969	8,346	79·7
1970	8,180	88·4

Local Authority Ante-Natal Clinics.—In 1970, ante-natal clinics were held at three principal centres—Orchard Place, Firth Park and Manor—and sessions were also held in 19 subsidiary centres.

Since 1968 the policy has been that, although booking for hospital delivery can still be made through our clinics, the continued medical care of ante-natal patients should, wherever possible, be a joint undertaking between general practitioner and the hospital unit, the clinic doctor supervising only those patients to whom the general practitioner does not wish to give ante-natal care. Advice and help in difficult social circumstances have remained the responsibility of the local authority staff, and the follow-up of defaulters from hospital and general practitioner clinics as well as from local authority clinics has been undertaken by the health visitors and domiciliary midwives.

During 1970, 2,709 patients attended for the first time compared with 3,184 in the previous year, and there were 11,587 total attendances, a decrease of 2,549 from 1969. Although the new policy is having some effect on clinic attendances, it is evident that tradition dies hard, and it seems unlikely that this transitional stage will be concluded before the introduction of a reorganised Health Service.

The following table shows the relationship between requests regarding place of confinement made by patients attending the local authority ante-natal clinics and the actual allocation of bookings.

Number of patients attending for the first time	2,709
Number of patients requesting hospital confinement	2,418
Living in own home	2,262
Living in rooms	154
Living in institutions	2
Not pregnant or miscarried	138
Left the City before confinement	18
The remaining 2,262 patients were booked as follows:—	
Hospital	2,206
Home	55
Chapeltown Maternity Home	1
Number of patients requesting home confinement	291
Living in own home	289
Living in rooms	2
Not pregnant or miscarried	9
Left the City before confinement	1
Arrangements were made for the remaining 281 as follows:—	
Home	123
Hospital	158

It is interesting to note that 91·2% of requests for hospital confinement were met, compared with 72·6% in 1969. Only 55 women, none of whom had urgent medical or social indications for hospital delivery, were unable to be allocated a booking, and the majority of these attended in the early part of 1970. As the year proceeded, it was a most welcome experience to know that the availability of hospital beds meant that almost every request could be met.

A strong preference for a home confinement was expressed by 291 patients (10·7%) attending for the first time, but of these 158 (54·3%) were delivered in hospital. 41 of the 158 were admitted to hospital towards the end of pregnancy on the grounds either of post-maturity or some unexpected complication; the remainder were persuaded at an early stage after the first visit to accept a booking in the consultant or general practitioner unit, on the grounds that medical or social conditions made a home delivery inadvisable.

Extra-Marital Pregnancies.—During 1970, 353 women and girls were unmarried at the time of their first attendance at the local authority clinic; in addition 97 married, separated or divorced women having illegitimate pregnancies attended. Of the total 450 patients, 311 were pregnant for the first time.

The 450 patients fell into the following age groups (with comparison with the 1968 and 1969 figures):—

	13 yrs.	*14 yrs.*	*15 yrs.*	*16 yrs.*	*17 yrs.*	*18-21 yrs.*	*Over 21 yrs.*	*Total*
1968	—	1	8	44	71	259	173	556
1969	1	—	7	29	78	233	140	488
1970	—	—	10	43	69	206	122	450

It is noted that there is a further slight decrease in total figures, but the age distribution is approximately the same.

Of the 353 unmarried patients, 120 were married before the confinement took place, including 2 of the 15 year old girls, 17 of the 16 year olds and 28 of the 17 year olds. Arrangements for delivery were:—

Hospital	388
Home	2
Chapeltown Maternity Home	1
Left the City before confinement	15
Miscarriage or abortion	15
Not pregnant	29

In 1970, 19 expectant mothers and 3 other post-natal mothers had some period of residence in the Mother and Baby Home, Hucklow Road. The following table shows the number of patients accommodated in the home since 1967 and the duration of stay. The number of admissions has decreased and there is a particularly rapid fall in the number of post-natal residents.

	1967	1968	1969	1970
Ante-natal patients	34	35	22	19
Post-natal patients	21	20	19	6
Total patients	38	37	31	22
Total number of resident days ...	1,407	1,286	845	643
Average stay	37	35	27	29

In the group of 450 patients attending our ante-natal clinics 108 had their own homes, 286 lived with their parents, 54 were in rooms, 1 came from the Remand Home and 1 from the House of Help. It is an interesting observation that in 1965, 409 (72%) of a similar group were living in rooms compared with 54 (12%) in 1970, and the numbers living at home with their parents was 95 (17%) in 1965 compared with 286 (64%) in 1970. This change, coupled with the low number of admissions to the Mother and Baby Home, is perhaps a reflection of the changing attitude towards the unsupported mother which enables her to feel that she can remain in her home surroundings rather than seek anonymity at a distance. There was a wide range in the length of stay, varying from 1 day to 80 but in over one third it was of less than two weeks' duration. In the majority of patients the stay was for the ante-natal period only which contrasts sharply with the situation in previous years, when a high proportion of the mothers returned to the home for a period following delivery. There is an increasing tendency to foster babies intended for adoption immediately after leaving hospital, and those mothers intending to keep their baby appear to find it possible to begin to settle to their changed circumstances equally early.

The future of the Mother and Baby Home will be with the new Department of Social Services. The changing pattern of its occupancy will no doubt provoke questions as to whether in its present form it is outliving its usefulness and perhaps could be adapted in some way to meet other pressing needs also.

ANTE-NATAL CARE

In addition to general obstetrical supervision, certain routine screening procedures are carried out during the ante-natal period.

Chest Examination.—405 patients were referred to the Mass Radiography Unit for chest X-ray and 282 patients to the Chest Clinic for consultation and X-ray where necessary. B.C.G. vaccination was advised for 223 babies. Two new cases of active tuberculosis were diagnosed; both these patients were admitted to Lodge Moor Hospital for treatment and ante-natal care was carried out during their stay by the local authority clinic doctors. Both were delivered in hospital maternity units after arrangements had been made for their isolation.

For some years it has been the general policy not to refer all ante-natal patients for chest X-ray. Those women who have not had an X-ray within the previous two years, or have never had B.C.G. vaccination, or are recent immigrants are referred after the fifth month of pregnancy. In all other cases, chest X-ray is carried out only if circumstances point to its advisability. The fact, however, that two new cases of active tuberculosis were discovered, emphasises the importance of careful assessment of each individual patient.

Blood Examination.—It is important that in the case of every expectant mother, information should be available regarding her blood group and rhesus factor, any evidence of venereal infection, and whether or not she is anaemic. Relevant blood samples are obtained from every patient attending the clinics, and the general practioners also refer patients booked for home confinement under their care for this purpose. During 1970 samples were examined from the following number of patients:—

Grouping and rhesus factor	2,629
Wasserman, Kahn, etc.	3,037
Haemoglobin	4,544
Other tests	740

Rhesus Factor.—Examination of 2,629 blood samples for the rhesus factor showed 26 women attending local authority ante-natal clinics had developed rhesus antibodies. One left the City before delivery, one proved to be not pregnant and the remaining 24 were delivered in hospital. All 24 patients had live babies, 18 of whom showed signs of haemolytic disease of the newborn, but in only 9 was the condition severe enough to need exchange transfusion. Women who were rhesus negative without antibodies, but showed a significant result to a blood test performed within 36 hours of delivery, were immunised with immunoglobulin in order to prevent the risk of haemolytic disease in future babies. The test and immunisation are available for all rhesus negative women whether delivered at home or in hospital.

Tests for Venereal Disease.—During 1970, 3,037 blood samples were examined at the Public Health Laboratory for evidence of venereal disease and four women showing evidence of syphilitic infection were referred to the Special Clinic for treatment. In addition, three patients with negative tests but with a history of previous syphilitic infection were referred; two of these were already receiving treatment for gonorrhea.

Haemoglobin Estimation.—Haemoglobin estimation on first attendance at the ante-natal clinic showed that 28 patients had a severe degree of anaemia (haemoglobin 59% or under) whilst 195 had a moderately severe anaemia (haemoglobin 60%-69%). Repeat estimations carried out between the 28th and 32nd week of pregnancy, showed 6 patients to have a haemoglobin value of less that 60% and 137 were found to be between 60% and 69%.

Hookworm Infestation.—Serious anaemia in coloured women immigrants may result from hookworm infestation, and is of a type which cannot adequately be treated unless the underlying infestation is eradicated. Specimens of faeces from coloured immigrant women attending the local authority ante-natal clinics are examined for parasites, and patients found to be infected are referred for treatment, either to their own doctor or to the hospital to which they are booked. Two of the 77 faecal specimens sent for examination showed evidence of the hookworm parasite. Both of these patients had a severe degree of anaemia.

Rubella Contacts.—An awareness of the potential danger of rubella during the early months of pregnancy brought 42 patients to the clinic for advice because they had been in contact with this infection. In 13 cases protection with immunoglobulin was not indicated, but in the other 29 cases immunoglobulin injections were given. One woman left Sheffield before delivery, 2 proved to be not pregnant, and 2 miscarried; 9 had normal live babies and 15 are still to be delivered.

During the summer of 1970, over 2,000 girls of 13 years of age were immunised with rubella vaccine in order to produce an immunity lasting through the child-bearing age. It is hoped that, as this scheme develops and becomes a routine part of the immunisation schedule, ante-natal patients of the future will be assured that at least one factor producing congenital defects in babies has been eliminated.

Dental Treatment.—Facilities are available for ante-natal patients to receive dental care at school dental clinics. The number of patients who can be persuaded to attend the clinic for examination and treatment has been very small. Some patients do indeed attend their private dentists, but only too often this proves to be an empty promise, and nothing further is done in spite of advice from doctors and midwives.

Outcome of Pregnancy.—A survey of 2,932 patients who attended the local authority clinics and were booked to be confined in 1970, showed that 2,275 patients were delivered in hospital, 252 were delivered at home, 5 were delivered in Chapeltown Maternity Home and 29 in the General Practitioner Unit of Nether Edge Hospital.

In addition 134 patients miscarried, 77 left the City before confinement, 141 proved not to be pregnant and 5 moved address and were not traced. Pregnancy was terminated in 14 cases.

Details of deliveries were as follows:—

Northern General Hospital.—1,251 patients. There were 15 sets of twins and one set of triplets in a total of 1,252 live births and 16 stillbirths (674 males and 594 females). These included 22 patients previously booked to Nether Edge Hospital and 61 who were booked for home delivery but transferred later in pregnancy or at term to the Northern General Hospital.

Nether Edge Hospital.—974 patients. There were 5 sets of twins and one set of triplets in a total of 974 live births and 7 stillbirths (513 males and 468 females). These included 8 patients previously booked at the Northern General Hospital but delivered in Nether Edge Hospital, and 42 who were booked for a home confinement but transferred to Nether Edge during pregnancy or at term.

Nether Edge Hospital General Practitioner Unit.—29 patients. 29 live births (16 males and 13 females).

Jessop Hospital for Women.—50 patients. There was 1 set of twins, in a total of 51 live births (22 males and 29 females). Of the above, 8 were previously booked for Nether Edge Hospital, 5 for Northern General Hospital and 24 for home confinement. The remainder were mostly referred by general practitioners prior to arrangements being made by the clinic.

Home Deliveries.—252 patients. There were no twins in 251 live births and one stillbirth (128 males and 124 females); 18 of these patients had previously been booked at the Northern General Hospital and 4 at Nether Edge Hospital.

Chapeltown Maternity Home.—5 patients. There were 5 live births and no stillbirths (2 males and 3 females).

The services of a midwife were allocated to 844 patients who had not attended the clinic.

The 2,561 confinements resulted in 2,562 live births and 24 stillbirths and included 21 sets of twins and 2 sets of triplets. Of the 2,562 live births, 28 babies died within the first four weeks of life, 21 of these within the first week.

Stillbirths and deaths during the first week of life are classified together as perinatal deaths, as it is recognised that similar causes are operating in both groups.

Out of 2,586 live and stillbirths among patients attending local authority clinics there were 45 perinatal deaths. The following table shows an analysis of the underlying causes.

Cause	*Number of Stillbirths*	*Number of 1st week deaths*	*Number of Perinatal deaths*
Twins	1	2	3
Foetal abnormality	2	1	3
Maternal toxaemia	2	—	2
Ante-partum haemorrhage	3	3	6
Placental insufficiency	6	1	7
Difficulties in labour ... ... (including cord complications)	3	4	7
Maternal conditions	1	—	1
Prematurity, no cause known	3	10	13
Mature, no cause known	3	—	3
TOTALS	24	21	45

Foetal abnormalities included one baby with multiple defects, one anencephalic and one case of congenital heart defect. Three deaths occurring in the next three weeks of life were due to congenital heart defect (2) and acute influenzal infection (1).

Maternal Deaths.—There were no maternal deaths occurring in patients who had attended a local authority clinic.

Post-natal Clinics.—This is an important visit, and every effort is made to encourage the mother to attend for examination, whether it is carried out by the general practitioner or at hospital or a local authority clinic. The visit includes a brief general and more detailed local examination, including a cervical smear where appropriate, to ensure that any abnormalities developing during pregnancy or delivery have either disappeared or are treated. It also provides an opportunity to discuss baby's progress, any general problems or anxieties that may have arisen, and to give information and advice on family planning. Where possible, continuity of care through the ante-natal and post-natal period is preferable, and patients are encouraged to return for the post-natal examination to whichever doctor has been responsible for their supervision during pregnancy.

664 post-natal patients were examined at the local authority clinics with an overall attendance of 832.

Family Planning Clinics.—During 1970, 2,390 new patients attended the clinics compared with 1,967 in 1969; there were in addition 2,748 patients who had been seen in previous years. New clinics were started at Kelvin, Carbrook and the Birley Health Centre, giving a total of 28 sessions held at 17 centres each week. All recognised methods of contraception are available including the fitting of the intra-uterine device which is carried out at five centres. An analysis of the methods advised (some patients used more than one method during the year) were as follows:—

Oral contraceptive	1,504
Cap	333
Intra-uterine device	246
Sheath	201
Other methods	118
Advice only	96
	2,498

In all cases, consultation, medical examination and advice have been free of charge and, where family limitation is recommended on medical grounds, contraceptive supplies have also been free. Patients who have not been recommended for free supplies on medical grounds and who feel unable to pay the full cost, have been referred to the Assessment Sub-Committee of the Health and Welfare Committee. In 1970, 220 patients received free supplies on medical grounds and 104 on social grounds after referral to the Assessment Committee.

An analysis has been made of the parity of new patients attending the clinics and of their social grading (Registrar General's classification).

Parity	*Number*	%	*Social Grading*	*Number*	%
0	298	12·5	1	52	2·2
1	538	22·5	2	220	9·2
2	766	32·0	3	1,398	58·6
3	433	18·2	4	265	11·0
4	190	7·9	5	264	11·0
5	87	3·6	Unclassified	191	8·0
5+	78	3·3			
All parities	2,390	100·0	All grades	2,390	100·0

In most areas of the City, family planning services are now available at an easily accessible clinic, but this does not necessarily mean that all women for whom contraceptive measures seem advisable on medical or social grounds, will approach us for an appointment in time to prevent an unwanted pregnancy occurring. A number of women for various reasons find it difficult, if not impossible, to attend and many of these are the very people for whom family planning advice seems most urgent. A Domiciliary Family Planning Service was inaugurated in January 1971 to offer to women with special difficulties, advice and contraceptive measures in their own homes until such times as they find it possible to attend the nearest clinic. The identification of such patients will depend to a great extent on health visitors and social workers and also on voluntary societies.

In any individual case the need for family planning advice may be recognised by any one of a number of people interested in the welfare of the woman and her family. Once the woman is in a receptive frame of mind to suggestions that she seeks family planning advice, it is vital that she should be put in touch with a family planning centre at once, otherwise the opportunity once wasted, may not present itself again. This seems to be particularly important in the immediate post-natal period and we should like to work towards a closer liaison with the hospital and general practitioner maternity units in this respect.

Child Welfare Clinics.—Tradition may help or hinder progress, but in relation to Child Welfare clinics one of the outstanding advantages which tradition brings is the fact that this is a service which has come to be associated, not so much with illness, disease or accident, as with prevention, advice, counselling and support. It is difficult to think of any comparable set-up where children in the first five years of life are encouraged to come so that skilled people can watch and observe them, and where knowledge of local circumstances enables the child to be seen as a whole person, set in a particular social background with his own potential to be developed. Linked with this is the great asset, from the point of view of the staff, of being able to see appreciable numbers of normal healthy children so that there are unparalleled opportunities to become experts in the normal—to appreciate the whole wide range of normality and its variations, to know what falls within normal limits and what lies outside the extremes of normal, and so to be able to detect and interpret the difficult border-line signs. A whole wealth of material is there, but unless we are careful we may fail to recognise its value, and its very normality could lead to monotony, routine, boredom and disastrous failure to appreciate the significance of what is presented to us.

During 1970, 7,032 babies and young children were seen for the first time and total attendances numbered 76,074. Sessions were started at the new Kelvin Centre, at our first purpose-designed Health Centre at Birley, and in the Norfolk Park Community Centre as a prelude to the opening of the Health Centre on this estate in 1971.

Preventive Psychiatry.—The function of safeguarding the health of children is a complex procedure in which the promotion of measures conducive to emotional health and well-being is equally as important as the maintenance of physical health. Signs of emotional ill-health or disturbed relationship between mother and child are often first indicated by variations in behaviour of the young child, and recognition of such

changes is essential if steps are to be taken to allow the child's emotional development to mature. Doctors and health visitors working in the child welfare clinics are encouraged to develop this aspect of clinic work and are supported in this by Dr. Horsley to whom cases of special difficulty are referred. Factors hostile to emotional development may have their origins in maternal attitudes to pregnancy and Dr. Horsley continues to give help to women who may have difficulty in adjusting to their changing circumstances. The recognition and treatment of problems in pregnancy could be particularly important as a contribution towards the prevention of the "Battered Baby" syndrome (see p. 47).

Health Education.—The Child Welfare Service enables us to follow the progress of a child from an early stage in his total setting—not just in isolation but as an individual subject to all kinds of influences, and we may have to try to determine whether we should attempt to alter some of these influences and, if so, for what purpose and in what manner. Health education is an attempt to define the principles of health, to give factual information and influence attitudes in such a way that parents can accept it and use it in the making of their own decisions on matters of health. All members of the clinic staff are potential educators and throughout the year have participated in health education, whether on an informal individual basis or by talking and discussing in special groups.

Screening Procedures

Deafness.—Screening tests for defective hearing should form part of the development assessment of every child at different stages of growth, and this is especially the case when a child is known to be 'at risk'. The health visitors arrange for simple screening tests to be carried out either in the child's home or in the clinic (page 120), and each clinic doctor includes such tests in the routine examination of the child. During the year 118 children were referred to the School Health Service for more detailed testing in the audiology clinic.

Eye Defects.—In 1970, 159 children with definite or suspected strabismus were referred from the clinics to the ophthalmic department of the Hallamshire Hospital.

Phenylketonuria.—From 1st March, 1970, the Guthrie test replaced almost completely the 'nappy test' as a screening measure to detect phenylketonuria. The Guthrie test includes the special examination of a small quantity of blood obtained by pricking the baby's heel, and is considered to be a more reliable test. The blood is taken on the sixth day of life by the midwife who has the charge of the baby on that particular day, and very careful measures have been adopted to ensure that no baby is left unscreened.

Since the new arrangements 6,932 blood samples from babies born to Sheffield women were examined at the M.R.C. laboratory at Middlewood Hospital. One positive case was found and the baby is receiving treatment through the Children's Hospital. In addition, the health visitors carried out 1,577 urine tests on babies born before the introduction of the Guthrie test and also on a number of babies born outside Sheffield for whom no Guthrie test was available.

Register of Congenital Abnormalities.—This register is compiled from various sources. Many abnormalities detectable at birth are indicated on the birth notification form by the midwife and from scrutiny of stillbirth registrations (76% of the abnormalities entered on the register in 1970 were notified in this way). Many of the remainder did not become evident until some time after birth, and were notified through copies of hospital discharge letters and from information provided by health visitors, clinic doctors and general practitioners, all of whom have given most valuable co-operation. Although these defects are not notified to the Registrar General which are limited to those detectable at birth, many constitute very real handicaps to the future development of the child and, without them, a comprehensive picture of the total incidence of abnormalities would be incomplete.

'At Risk' Register.—This register includes the names of children in whom some factor has been, or is still, operative, which may possibly interfere with normal development. These factors may have a genetic basis, or arise during the ante-natal or perinatal period, or may first appear in postnatal life through accident, illness or social circumstances. If the register is not to become unmanageable some assessment of the gravity of the risk is advisable, taking into account the cumulative effect when more than one factor is operative.

Both the 'At Risk' register and the 'Abnormality' register are reviewed at intervals to ensure that all necessary action is being taken. Many of the babies on both registers have been under hospital supervision since birth, but it is still essential that a watchful eye should be kept on their progress, especially where the mother finds regular hospital attendance difficult.

Carbrook Nursery and Clinic for Handicapped Children.—Since October 1970 various alterations have been initiated in the care of the pre-school handicapped children.

A closer liaison has been built up with Dr. Trevor Wright's Unit for the Assessment of Handicapped Children at Ryegate Annexe, giving us access to his expert knowledge and also to that of the physiotherapists, occupational therapists and speech therapists. The medical social workers at Ryegate also supply the names of children who they feel would benefit from attendance at Carbrook nursery.

Dr. Wright and Miss Birch, the Senior Occupational Therapist at Ryegate Annexe, visited Carbrook nursery last November and made suggestions for the improved use of space and suitable equipment for the various activities. These recommendations are now being implemented and both the staff and children are benefiting. In December an extra nursery nurse was appointed, bringing the staff number to six, looking after two groups of children who attend alternately for either two or three days per week. Two personnel carriers are now being used to transport the children, which cuts down the travelling time and allows the children more time at the nursery. It is intended to hold an inaugural meeting to form a Carbrook Nursery Parents' Association during the early part of 1971 and to continue this if the parents are sufficiently interested.

The clinic for handicapped children is now being held at Kelvin Welfare Centre, where the rooms available allow assessment of the children in a more suitable environment. Since October a total of 40 new children mainly referred by health visitors and medical social workers has been seen. Some have been given places at Carbrook Nursery or placed on the waiting list, some have been given an intelligence test for school placement and others are being followed up to assess their development and decide on any further action.

Cervical Cytology.—During 1970 the cervical cytology screening service continued with special appointment sessions held regularly at 18 centres and, in addition, tests were carried out on selected women attending the ante-natal, post-natal and family planning clinics. The test is designed to detect changes in the cells of the cervix which, if untreated, could possibly develop into overt malignancy at a later date. The service also provides an examination of the abdomen, pelvic organs and breasts, blood pressure and urine and gives the patient an opportunity to discuss any anxieties regarding her general health.

In 1970, 8,840 women were screened, an increase of 2,061 over the previous year's numbers. The following table shows the number of women in two age groups who were tested at different types of clinic.

Clinic	*35 years or over*	*Under 35 years*	*Total*
Cytology	3,160	1,516	4,676
Ante-natal & Post-natal Clinic ...	144	824	968
Family Planning Clinic	758	2,438	3,196
	4,062	4,778	8,840

4,676 (53%) attended the special appointment clinics, 1,288 more than in 1969, and of these 3,160 (74%) were 35 years of age or over. Of the total 8,840 women examined, 517 (6%) had had five or more pregnancies.

The results of the smears taken in 1970 are as follows:—

Negative smears	8,774
Positive smears	12
Suspicious, not proven positive	54

Of the 12 women with positive smears, 11 were over 35 years of age, but the the youngest was 28 years old. Ten of the positive results were in women who had requested an appointment (all 35 years of age or over) and the other 2 positive results were in tests taken at our ante-natal and post-natal clinics. All the patients with positive or suspicious results were referred to their own general practitioner with a view to further gynaecological investigation in hospital. The Cytology Department of the Northern General Hospital makes regular follow-up enquiries to confirm that these patients have been referred.

Other abnormalities found on clinical examination included:—

Cervical erosions (large)	367
Cervical polyps	92
Uterine fibroids	56
Trichomonas or monilial infections	233

In addition 20 breast tumours were detected, two of which proved to be malignant.

During the year four factories, a large City store and the Central Post Office were visited by a team of doctors and nurses, and the examinations were carried out on the premises, to enable women to attend for the test during working hours. 727 women were screened at these special sessions, the numbers at each place of work varying from 24 to 300. 72% of the women were aged 35 years and over. In addition 20 women from offices in the City centre were examined at Orchard Place, and 123 home helps were seen at Firth Park and Manor clinics. It is interesting to note that, of the 12 positive cases discovered by the test, 5 were amongst the 727 women working at the firms visited. It appears that the easy availability of the test in working hours, encouraged by a keen personnel officer and the confidence engendered by group participation are factors which greatly influence individual decision to accept the test.

In 1969-70 a direct approach was made by personal letter to women in the 35-60 age group who were on the list of a group of general practitioners operating in a well defined area. 1,587 women received letters and 587 replied, 445 of whom wished to have the test; 142 had recently been screened or had a hysterectomy. 63% of the number circularised ignored the letter and, although it had been hoped to visit these women, unfortunately the two health visitors attached to the practice had long periods of sick leave and so only a very small proportion in fact received a visit. Of the 30 visited 22 agreed to be screened. Although the number of women attracted by the scheme was small, nevertheless valuable lessons for the future were learned. In particular the necessity has been recognised for prior health education and publicity in the area before letters are sent, and the advisability of concentrating the screening session within a limited period of time to counteract loss of interest and movement of population.

DENTAL SERVICES

By Mr. E. COPESTAKE,

Principal School Dental Officer

"I can generally bear the separation, but I don't like the leave-taking"

Samuel Butler

Of the few developments taking place in the last year the proposal to introduce a new scale of charges to patients attending general dental practitioners is one which may affect the school dental service. Nursing and expectant mothers and also children up to 18 years of age are to remain exempt from charges. These changes may result in fewer adult patients visiting the dentist regularly. If in turn the general practitioner has additional free time he might encourage more children to take advantage of it and this would be most desirable.

Another development and one which local authorities will be expected to continue to support, is in the field of post graduate studies. In the years 1967 and 1968 the number of general practitioners attending such courses doubled and in future these courses are to be organised at regional level by committees representing all sections of dental activity. Now that dental graduate courses cover an increasing range of subjects no more than a nominal coverage can be given to each in the time available before a student qualifies. The current trend, therefore, is to direct post graduate courses at providing further knowledge and skills for those who have had time after qualifying to mature and consolidate the training received as a student. Some of these courses are short, intensive and confined to a single activity of dental practice, and it is these that appear to be of most value if the number of those attending is any indication of practitioners' needs.

The school dental service has been criticised in that less than half of the school population is examined in schools each year, though this is equally as true of the overall national service as it is of Sheffield. Our statutory obligation is to examine each school child every year and be in a position to provide any treatment which is required. To fulfil this would necessitate the employment of twice the number of staff we can accommodate in the existing surgeries. The difficulties met in obtaining staff are known but methods of attracting them such as the provision of modern well equipped surgeries, a sprinkling of specialist and senior responsibility appointments, facilities for carrying out research, and release for both short and long term post graduate training are seldom applied. Such a programme would be expensive but could be expected to produce a suitable return. Over the last six years, for example, seven surgeries have been equipped to a very high standard, and in terms of items of treatment the output per dental officer in that period has doubled. The alternative, if we wish every child to have an annual examination, is to press on with fluoridation. This would be cheaper, it would halve the need for treatment, release the school dental service from obligations it cannot meet and make it possible for each dental practitioner in the City to cope with twice his present number of child patients.

In considering how we should direct our resources at this moment, it is possible that more than one local authority would hesitate to radically augment its school dental service while Parliament continues to ignore the need to direct water boards and departments to fluoridate water supplies, and give a decisive yes or no to the implications of the recent green paper on the reorganisation of the health services. The paper may have been tabled but the possibility of a transfer of responsibility for the dental service is still with us.

MIDWIFERY

By Miss W. REDHEAD, S.R.N., S.C.M., M.T.D.,

Non-Medical Supervisor of Midwives

"There's no economy in going to bed early to save candles if the result is twins"

Chinese Proverb

The increasing decline in the number of home confinements during 1970 produced a general feeling of disquiet and insecurity regarding the future of their chosen profession amongst the domiciliary midwives. This, however, was relieved in some measure by the changing pattern of their duties and by the opportunity afforded them later in the year to participate in the work carried out in the General Practitioner Unit at Nether Edge Hospital. The staff on the whole are adaptable and would now appear to have accepted a situation which they have come to regard as inevitable.

Liaison with General Practitioners.—During the year considerable progress has been made in this field. Complete attachment of midwives to general practices has not yet been achieved owing to the retention of the midwives' geographical areas, and the inability of some doctors to accommodate a midwife in their existing surgeries. However, good liaison has been established and 34 midwives are now attending one or more weekly sessions at 40 general practitioner surgeries. They assist in the ante-natal care of all the doctor's patients irrespective of the place of confinement, or whether the patient is booked to a consultant unit or general practitioner bed. This liaison has brought about a measure of continuity of care which was previously lacking, particularly with regard to the women booked to consultant units who, although often remaining in hospital for longer than 48 hours after delivery, are almost all discharged before the 10th day of the puerperium. The opportunity for these patients to meet and talk to a midwife has been greatly appreciated. General practitioners in the past have experienced difficulties in the following up of defaulters from their clinics and this work is now carried out by the midwife attending the practice.

As more health centres are completed in the City, it is hoped that ultimately complete attachment of all midwives to general practitioners will be achieved, with the consequent abolition of the midwife's district. There is no doubt that the staff are favourably disposed towards the higher degree of co-operation obtained in areas where the system is in operation.

The General Practitioner Unit, Nether Edge Hospital.—After several preliminary meetings between hospital administrators, consultants, general practitioners and local authority representatives, it was agreed to formulate a scheme which would allow domiciliary midwives to deliver and nurse a specified number of patients booked by general practitioners for delivery in the unit and 48 hour stay. In order to qualify for this participation the midwife concerned must have shared with the general practitioner at his clinic the ante-natal care of the patient. Midwives visited the unit to familiarise themselves with hospital procedures and the equipment available for their use and the scheme was introduced at the beginning of September, 1970.

In order to assess any problems arising, in what would be an entirely new enterprise for the domiciliary midwives, bookings at first were minimal. Suprisingly, few difficulties were encountered, perhaps because both the hospital and domiciliary midwives were determined to make the scheme successful. There has since been a steady increase in the numbers of patients booked for this type of maternity care, which is enabling the domiciliary midwife to preserve her skills.

Early Discharge.—The total number of mothers discharged from hospital before the 10th day was 5,759 which was an average of 480 per month and, of these, 2,145 were discharged before the 5th day. In 1969 5,132 patients were discharged before the 10th day, an average of 428 per month.

Details of hospital discharges are given on page 124.

The following is a summary of visits paid by midwives during 1969 and 1970:—

	1969	1970
Home visits during ante-natal period	9,097	6,603
Nursing visits 10-28 days after confinement	28,896	19,561
Visits to mothers confined in hospital and discharged home before the 10th day	11,142	14,187
Visits to mothers booked by the hospital and discharged home after 48 hours	10,189	13,996
Visits for the purpose of assessing suitability for home confinement and early discharge	2,850	3,412
	62,174	57,759

Pupil Midwives.—Training in conjunction with the three maternity hospitals in the City continued. 43 district teaching midwives assisted in the training of 80 pupil midwives, a decrease of 12 pupils compared with 1969. Pupils are obliged to pass the first part examination before proceeding to second period training and the failure rate was somewhat higher than usual. A comprehensive programme of community care was incorporated in the pupils' training and valuable assistance was given by the Children's Department, public health inspectorate, the ambulance, home help, social psychiatry, school health and probation services. Visits to a City Council meeting, Court of Quarter Sessions, Mossbrook School for spina bifida children and a modern comprehensive school were all appreciated by the pupil midwives.

In July the biennial inspection of external training for pupil midwives was made by an Education Officer from the Central Midwives Board.

Obstetric Nurse Training.—During the year 55 nurses undertaking obstetric courses during general training spent a day with the domiciliary service.

Domiciliary Care of Premature Babies.—Five full-time midwives and one part-time midwife were kept fully occupied during the year. The long term illness of one member of the team made it necessary to send another midwife for training in the care of premature and sick babies. In 1970 5,914 visits were made to 706 premature and dysmature babies compared with 6,142 visits to 646 babies in 1969. 35 students from the three City Maternity Hospitals taking courses in the care of premature and sick babies spent a day with the domiciliary special care baby midwives. The special care staff have a night rota whereby one member is on call and available to give assistance to any midwife requiring her services for reasons of prematurity or neo-natal problems.

Emergency admission of neo-nates is accepted by hospitals at the request of the special care baby midwives without reference to a general practitioner in urgent cases where delay would not be in the best interests of the baby. Heated transporters complete with oxygen are based at the Northern General and Jessop Hospitals and are collected from the hospitals by the ambulance service at the midwife's request.

HEALTH VISITING

By Miss O. B. De Neumann, S.R.N., S.C.M., H.V.Cert.,

Superintendent Health Visitor

"We are generally the better persuaded by the reasons we discover ourselves than by those given us by others"

Blaise Pascal

The part played by the health visitor in community health is both varied and extensive. Her role in preventive medicine is complex and demanding and involves her in early detection, comprehensive advice, health education, support and counselling to any member within the family group. The number of home visits made by the health visitors during the year increased from 108,739 in 1969 to 110,114 in 1970 in spite of an unusual amount of sickness amongst the staff. Details of visits are given in the appendix on page 120.

Staff and Administration.—The pattern of administration may well change in the near future if the recommendations of the Department of Health and Social Security Circular 13/70 on the Management Structure in the Local Authority Nursing Services based on the Mayston Working Party are implemented. This report envisages the appointment of a Chief Nursing Officer responsible for the co-ordination of all nursing services within the local authority and, on the whole, should create a much improved career structure. The present general administration of the Health Visiting Service based at Orchard Place Maternity and Child Welfare Centre, is conveniently situated close to Town Hall Chambers which houses the Medical Officer of Health and his administrative staff. There are five group adviser health visitors, who have all undertaken a special course in first line management and at the present time are based at clinics or health centres. Each has special responsibility for administration at field work level for a group of 10-12 health visitors who, in turn, work from clinics, health centres or are attached to groups of general practitioners. The group adviser, also responsible for a small working area, supervises up to three student health visitors during the last ten weeks of training, and gives advice and support to newly trained staff.

The appointment of another group adviser would be an advantage in that the City could then be divided into six workable areas roughly coinciding with those of the new Social Services Department. The present staff complement is a Superintendent Health Visitor, Deputy Superintendent Health Visitor, five group advisers, fifty three full-time and eleven part-time health visitors. In addition nine full-time and five part-time State Registered Nurses are employed as clinic nurses, some of whom assist the health visitors by routine visits to the elderly.

Further decentralisation of staff was made possible in 1970 when the Kelvin clinic and Birley Moor Health Centre were opened, and now a total of forty health visitors are peripherally based. In spite of this the accommodation at Orchard Place is still inadequate, and staff, particularly those involved in student health visitor training, work under great difficulties. It is anticipated, however, that with the further development of health centres, and the provision of satisfactory office accommodation for the health visitor in general practitioner group practices, the difficulties should lessen.

In September ten newly qualified health visitors joined the staff after completing one year's training at the Sheffield Polytechnic. During the year seven full-time and two part-time health visitors resigned and of the full-time staff four emigrated with their husbands, two married and left the City and one retired.

It was possible to reduce the excessive work loads for a small number of health visitors but many are still far too large for our staff to achieve maximum job satisfaction. To attain this it is essential that more clerical help be made available for them.

During the year several health visitors were asked and agreed to serve on School Management Committees.

General Practitioner Liaison and Attachment.—Birley Moor Health Centre became operative in March 1970 and two newly trained health visitors have been successfully attached to the five general practitioners at the Centre. Other health visitors at present liaising closely with the general practitioners at this Centre should experience the satisfaction of complete attachment when other health centres are built.

At the end of 1970 a total of ten health visitors was fully attached to group practices. On the whole our health visitors have developed a good working relationship with the general practitioners in their own areas and it is hoped that this will continue to develop as family doctors become more aware of the function of the health visitor, and of benefits the community will gain by such close co-operation.

Liaison With Hospitals.—During the year, 1,423 care and after-care visits were made to homes of elderly and other patients as a result of referrals from medical social workers or senior hospital nursing staff. It is anticipated that these will increase as total patient care involving the hospital and the community service develops still further. Most hospitals or groups of hospitals in the City have regular contact with a health visitor and over the year good relationships have been maintained. In spite of this it is unfortunate that there have been occasions, although very infrequent, when an elderly immobile person living alone has been discharged home to an empty, unprepared, unwarmed house. This type of case emphasies a deficiency in our communications which should be obviated by integration of the health services.

Health visitors attend weekly paediatric clinics at the Children's Hospital, Northern General Hospital, Jessop Hospital and also the Assessment Centre at Ryegate, where they provide home background reports of all children as requested by the paediatrician.

Premature Infants.—All premature infants born in the City are cared for on discharge by the special premature baby midwives until they reach 6lbs in weight and are making satisfactory progress. They are then passed on to the health visitor who continues their surveillance. For further details of premature babies born in 1970 see page 121.

Care of the Aged.—The health visitor's geriatric responsibilities are growing and in 1970, 20,207 visits were made to the elderly, an increase of 5,000 over the previous year. Their preventive role is essential in this field, especially with those at special risk i.e. the elderly living alone, the socially isolated, those recently bereaved, those with defect of locomotion, those with mental ill health, perhaps a sequelae of long term illness, and the very old. These vulnerables often come to light only as medical or social emergencies, and to prevent these they must be identified as early as possible and provided with the support needed before an acute crisis occurs.

Good co-operation with the geriatricians at the Northern General Hospital and Nether Edge Hospital continues and a senior health visitor liaises closely, attending all case conferences. One would hope that the relationship will be carried on in the future.

The day centres and luncheon clubs for the elderly handicapped and housebound people which operate in conjunction with Church and Community Associations satisfy a very real need. The area health visitors liaise closely and their visits to these centres afford opportunities to provide informal health education and advice.

Meals-on-Wheels Service.—This absolutely essential service providing two attractive hot meals per week to approximately 1,200 wholly or partially housebound elderly and handicapped persons continued uninterrupted throughout the year. It may prove possible in the future to provide more meals per week to some, if not all, people in need. The volunteers so vital to this service, who often deliver the meals under extremely inclement weather conditions, are to be highly commended.

Disposable foil dishes to be used for a trial period in 1971 are more hygienic and will, I am convinced, prove a boon by speeding up delivery time, obviating the need for washing up, thus enhancing the efficiency of the service.

Venereal Disease and Contact Tracing.—The field of contact tracing and default visiting is a difficult one. Mrs. M. R. Simpson was wholly employed in this capacity working very closely with Dr. Morton, Venereologist at the Special Clinic.

The following figures denote the visits made in 1970 and the success rate achieved.

Number of persons referred for visiting:—

	1969		1970
Contacts	477	111	678
Others		567	
Number of contacts traced and attending Clinic ...	96		81
Number of others who responded and attended ...	169		262
Effective visits	510		581
Ineffective visits	605		765
Total visits	1,195		1,346

The demand for lectures, discussions and films concerning venereal disease from schools, youth clubs and adult organisations continued.

Health Education.—A prime role of the health visitor is the promotion of positive health and prevention of its breakdown. This is most easily achieved through health education commencing ideally in the school environment. During 1970 health visitors took part in no less than 127 health educational sessions in schools.

In most of the larger Maternity and Child Welfare Centres health visitors arranged and took part in a variety of talks, discussions and demonstrations for ante-natal, post-natal and toddler groups. At Firth Park Centre two flourishing "Tufty Clubs" operate for children up to the age of seven years in conjunction with the Road Safety Section of the Sheffield and Rotherham Constabulary, and a health visitor gives advice and help where required. Here groups of senior school children attend weekly and assist with the supervision of the toddlers whilst the mothers participate in planned health education programmes.

Psychoprophylaxis.—Health visitors along with the district midwives took part in 344 sessions preparing the mother-to-be in a safer and easier method of having her baby.

The special classes for adoptive parents at the Manor Maternity and Child Welfare Centre continued in 1970 and eighteen talks were given. The afternoon sessions were attended by 39 prospective adoptive mothers and special combined evening sessions were arranged to enable their husbands to participate.

Parental love and example are still of the greatest importance to children and the best health education programme can only supplement this.

Home Safety.—Health visitors have a special preventive responsibility through health education towards the very young and very old who constitute the largest number of persons at special risk from home accidents, most of which are preventable.

Research and Surveys.—*Whooping Cough.*—Sheffield was chosen as an area for an investigation by the Public Health Laboratory Service. This was a continuation of the research into the efficacy of pertussis vaccines carried out in 1967/68 in which Sheffield had also participated.

The current survey commenced on 12th January 1970 and general practitioners were asked to notify any case of suspected whooping cough to the Public Health Department. A team of six health visitors working on an area basis has been delegated special responsibilities for the survey. As soon as possible after notification the health visitor visits the home, takes a pernasal swab from the patient and any other contacts under 9 years of age with symptoms of whooping cough, and records the immunisation history of both contacts and patients on special record cards. The processing of the data collected from the records is carried out at the Epidemiological Laboratory, Colindale. Repeat visits are made three weeks after the initial visit, and swabs are taken from any child contact who has developed a cough in the interim period. Cases notified late after antibiotics have been given are of no value to the survey and result in a waste of the health visitors' time.

Child Leukaemia.—Health visitors also took part in a survey on child leukaemia being carried out by Dr. Green. Parents of healthy children born about the same time as the children who died with leukaemia are visited, and those who agree to take part in the survey are asked to complete a questionnaire prior to a visit by Dr. Green. This is by appointment and arranged by the health visitor.

The questions posed concern the background of the children, and a comparison of answers is made to try to discover any differences between those in respect of healthy children and those for the children who died.

Screening of Vulnerable and at Risk Groups.—The Guthrie Test for phenylketonuria was introduced during the year to replace the Phenistix Test. Health visitors must ensure that this has been carried out when they make the first home visit to the new baby. If the test has not been done, the health visitor takes a small blood sample from the baby, by a heel prick, and despatches it to the M.R.C. laboratory at Middlewood Hospital for testing.

Paediatric developmental tests are undertaken by the health visitors and, as part of this screening, simple hearing tests on 2,789 babies aged seven months and over were carried out during the year, either in the child's home or in the clinic.

Health of Immigrants.—Health visitors visit all immigrants in the City who are notified to the Public Health Department by the sea and air port authorities. They advise on the need to register with a general practitioner, on essential services and arrange for chest X-rays. An Interpreter was appointed early in 1971 and this will greatly assist the health visitor in communication problems resulting from language difficulties.

Battered Babies.—A rise in the incidence of reported cases of the battered baby syndrome and the general publicity given to this distressing condition has caused great concern to health visitors and other social workers dealing with the family.

Health Visiting Training Course.—Ten student health visitors sponsored by the Sheffield health authority are at present undertaking the one year course at the Sheffield Polytechnic and hope to qualify in September 1971. Co-operation between the training school and the administrative and field work staff is very good.

During 1970 a total of 175 students of various disciplines spent a full session with the individual health visitors in order to gain some insight into their work.

Refresher Courses and Inservice Training.—Opportunities are available for all health visitors to attend a refresher course at least every five years and in 1970 seven health visitors attended a two week residential refresher course (at either Oxford or York). Two health visitors undertook the special six week course of training which enables them to teach the practical side of health visiting to student health visitors. All health visitors were given opportunities to evaluate a large number of films relating to their work.

Visitors and Students in Training.—Observation visits to child welfare centres, health centres and day nurseries were arranged for 190 students in various disciplines. Requests for this type of visit and for students to visit homes with the health visitors increases yearly.

Serious thought needs to be given to the new General Nursing Council syllabus, when after 1974, all student nurses in training will spend at least twelve weeks in the community. This will obviously necessitate the appointment of more trained staff.

Committees.—The Superintendent Health Visitor or her Deputy serve on the following Committees—Old People's Welfare, Nursing Education Sub-Committee, Children's Co-ordinating, Care and After Care, Tuberculosis Liaison, Adoption, Fairthorn and the Working Party for Handicapped Young People.

Maternity and Nursing Homes.—No new nursing homes were registered in the City during 1970 and at the end of the year there were eight registered nursing homes providing accommodation for 13 maternity and 150 other beds, occupied mainly by the aged. The Superintendent or Her Deputy carried out the statutory inspection of all the nursing homes and each received at least two visits. Sister Trevethick's Nursing Home was also registered as a Mental Nursing Home as from 15th December, 1970.

Nurseries and Child Minders Regulation, Act, 1948, Amended 1968.—During the year many applications for registration were received and at December 31st 1970 eighty three play groups were registered accommodating 4,000 children of pre-school age, and one hundred and eighteen people were registered to provide part or full day care for 260 children.

Miss B. White, a health visitor with special responsibility for this work, received excellent co-operation from the Pre-School Play Gruop Association.

The four local authority day nurseries in the City provided places for 190 children from the age of nine months to five years. All are approved for training nursery students. Priority for admission is given to unsupported mothers, one parent families or on other social or medical grounds. One day nursery serves specifically for mentally or physically handicapped children.

The Future.—Many changes are imminent and the Social Service Department which will be established in 1971 will also have certain responsibilities for the family. It is regrettable that the implementation of the Local Authority Social Services Act 1970 should have preceded related reform of the administration of the health services.

The health visiting profession has always been ready to accept essential change and, looking ahead, envisages a continuing need for its traditional role in the promotion of physical and mental health and well being, but with particular emphasis on the prevention of mental ill health at its origin in the emotional problems of childhood.

HOME NURSING

By Miss M. McGonigle, S.R.N., S.C.M., H.V.Cert., Q.N.Cert.

Superintendent, Home Nursing Service

"I'll leave it at careful nursing"

William Shakespeare (Pericles)

Whilst community care at present places emphasis on health education and preventive medicine, the principal aim of the Home Nursing Service is to provide nursing care in the homes of patients. Appreciative letters from families are a continual reminder of the relief and comfort which can be provided by skilled nursing of the sick and dying. With this in mind, amongst the many changes in which we are involved, probably the most important one for the service was the move towards attaching home nurses to groups of general practitioners. In the autumn four full attachment schemes were started and several others were being planned. Each scheme varies in detail and developments are watched with interest. Already there is evidence that, where attachment is possible, it provides an opportunity for good co-operation with other services resulting in better patient care.

The Home Nursing Service undertakes whatever is asked of it by general practitioners or hospitals but, as the statistics normally kept do not give a detailed picture of the work carried out, a careful record was made covering the work done during the week beginning the 15th February, 1970. This has provided a useful baseline when discussing the attachment of home nursing staff to groups of general practitioners so that in the future it will be readily apparent if the work expected of the home nursing team varies from that undertaken prior to attachment.

General Nursing Care	*Baths*		*Dressings*		*Colostomy*	*Enema or Bowel Washout*	*Catheterisation*	*Injections*	*Rehabilitation Post Stroke*	*Miscellaneous*	*Total*
	Bed	*General*	*Ulcer or Chronic*	*Post Operative*							
2,211	772	383	770	392	67	92	21	1,706 including 587 insulin 436 cytamen 135 cortisone 131 mersalyl 77 streptomycin	116	94 including treatment of eyes, oesophageal feeds, stomach washouts, douching, bandaging, and fitting calipers	6,624

The Patients.—During 1970 cases dealt with each month fluctuated between 3,000 and 3,500, the average number of new cases being 527 per month with 516 discharges. The amount of help given to any one patient depended on a variety of factors and ranged from a monthly injection to three visits a day. The night service provided help for acute cases which required more intensive care.

The power cuts in December caused hazards and several unfortunate accidents amongst the patients, but the nursing staff managed to overcome their difficulties by working in torch and candle light. The lifts in multi-storey flats were out of action, of course, during power cuts. This resulted in some nurses having to climb many stairs to visit diabetic patients in different tower blocks.

Prior to gas appliances being adapted to receive North Sea gas in various areas of the City, groups of nurses attended evening demonstrations arranged by the East Midlands Gas Board. These sessions enabled the staff to understand conversions so that they could in turn explain this to patients who were disturbed or apprehensive about the changeover.

A limited number of mobile patients were given treatment at the Firth Park and Manor Home Nursing Centres. These visits were mainly for injections and averaged 147 each month. With the introduction of attachment schemes it is expected that a similar arrangement can be made to give treatments in the premises of general practitioners.

The night service continues to meet a need in the City, helping where there is acute illness or in cases where chronic disablement throws a strain on families. During the year the establishment of night staff was increased to the equivalent of five additional nursing auxiliaries per night and one additional trained nurse. This brought the establishment to 25 auxiliaries for each night with a ratio of one trained supervisory nurse to eight nursing auxiliaries. Families received help on an average of three nights per week.

The recruitment of nursing auxiliaries for the night emergency welfare service particularly to cover weekends has been difficult since many nursing auxiliaries have small children and very few are free to do stand-by duty from 5.45 p.m. to 9 a.m. The service seeks to provide one nursing auxiliary to remain on call for any medico-social emergency which may arise outside the usual office hours as may occur when the key member of the family is admitted to hospital unexpectedly, leaving a young child or elderly person bereft of someone to care for them.

Staff Structure and Administration.—The implications of the Mayston report on Management Structure in the Local Authority Nursing Services were discussed in some detail during a number of meetings arranged in the late autumn by the Medical Officer of Health and Senior Medical Officer with responsibility for the personal health services. The Superintendent Health Visitor, the Supervisor of Midwives, the Chief School Nursing Sister and the Superintendent, Home Nursing Service were invited to put forward their views on the proposed new nursing staff structure. Favourable consideration was given to the appointment of a Chief Nursing Officer and plans were discussed for the various levels of management in accordance with the report. Miss M. E. Baddiley, Public Health Nursing Officer, Department of Health and Social Security, and the Assistant Town Clerk (Management) were invited to a further meeting in November, during which Miss Baddiley referred to a number of local health authorities who had agreed to act as 'model areas' under a scheme sponsored by the Department of Health. The Health and Welfare Committee subsequently decided to defer further action until experience had been gained from the 'model areas'.

With the development of the Home Nursing Service and multiplicity of grades of staff now employed giving a twenty-four hour per day coverage, an examination of the existing administrative structure reveals the need for improvement and replanning to avoid a situation where frustration and overwork will lead to impairment of performance.

Increasingly the need is felt for adequate preparation for management at all levels, and also the opportunity to encourage and develop teaching skills in order to establish good background knowledge and working methods. It will be noted from the following table that whilst staff working on the districts have increased greatly in numbers since 1960, the establishment of administrators is only one more than it was ten years ago.

Year	*Admin. Staff*	*Full Time S.R.N.*	*Part Time S.R.N.*	*Full Time S.E.N.*	*Part Time S.E.N.*	*Part Time Nursing Auxiliary*	*Total*
1960	5	50	28	—	9	1	93
1965	6	59	21	7	14	7	114
1970	6	75	18	34	1	67	201

The necessary and welcome increase of staff has involved extra administration and training programmes. Whereas ten years ago over one-third of the state registered and state enrolled nurses employed were not district trained, it is now a policy to appoint only those who are willing to take the National District Nurse Certificate training course as recommended by the Panel of Assessors, Department of Health and Social Security, since it is considered an essential part of modern community nursing with responsibility for total patient care.

During the year thirty-eight students completed training and all were successful in the examination. Twenty-nine of these were Sheffield students and nine came from neighbouring authorities. The superintendent marked examination scripts for other authorities on three occasions and attended a day conference in Wakefield studying the implications of the General Nursing Council syllabus 1969.

Resignations were received from one assistant superintendent, twenty-five trained nurses and fourteen nursing auxiliaries. The assistant superintendent vacancy was filled by promoting a senior member of the district nursing staff. Twenty-two state registered and state enrolled nurses and thirty nursing auxiliaries were appointed. The decrease in recruitment of qualified nurses was disappointing, whilst the recruitment of nursing auxiliaries allowed for an increase of establishment as well as replacing those who resigned. Those appointed were selected from some two hundred applicants, and with the annual turnover of staff, interviewing, appointing and training accounts for a considerable amount of administrative and clerical time.

Premises.—The Johnson Memorial Home which has been the hub of district nursing in Sheffield for more than forty years remained out of action during most of the year whilst major alterations proceeded. In the interim the Sharrow Lane Workshops continued to provide temporary accommodation for the administration of the home nursing service and the theoretical training of students. The Handicapped Persons Centre at Psalter Lane provided an office and telephone to serve the City during the evenings and throughout the night. With the goodwill and forbearance of all concerned the work proceeded without undue difficulty—indeed there were many pleasant memories to bring away when the Johnson Memorial Home was finally ready for re-occupation in mid-November. These premises now accommodate the Home Help Service and a Day Assessment Centre for elderly handicapped persons as well as a home nursing administrative centre and training facilities for students.

The two centres at North Quadrant and Ridgeway Road have been in use for just over ten years and during this decade the number of staff based at these premises has doubled. This, together with the large amount of space required for storage of disposable equipment, has presented increasing problems. Whilst concern is felt for the limited accommodation available, the increase in staff and the wide use of disposables are essential in order to cope with current demands on the service.

Visitors and In-Service Training.—One hundred and forty-five students and pupils from the Sheffield United Hospitals and the Northern General Hospital visited in groups, each nurse spending one to five days with a home nurse. All were given an introductory talk by a member of the administrative staff prior to the visits, and follow up discussions were also arranged. Representatives of the health departments from Richmond, Southampton and Edinburgh have visited Sheffield to study the details of the night nursing service and an enquiry from Reading was received.

Discussion took place early in 1970 between the Superintendent and the Principal of the School of Physiotherapy. Proposals were subsequently submitted to the Medical Officer of Health for an interchange of visits, and the scheme was given committee approval. Twenty-four physiotherapy students in their third year of training visited districts, each student spending two weeks with a home nurse. Great enthusiasm was shown and everyone concerned felt that physiotherapy could be used well in the domiciliary field. Groups of home nurses visited the School of Physiotherapy to learn some basic principles and simple exercises which could be used to help patients towards recovery. Between March and September all the staff were given this opportunity.

Two home nurses visited the Spinal Injuries Unit at Lodge Moor Hospital once a month. The liaison here is excellent and the nurses now realise that, when a problem arises, positive help and advice can be obtained by a direct telephone call to the unit.

Six home nurses attended refresher courses, each lasting one week and held in Cardiff, Leicester and Liverpool.

The senior staff have given some thirty-eight lectures and talks to various groups of students and voluntary organisations, and it is felt that this is a useful way of informing interested people about the scope of the home nursing service.

The Superintendent has been appointed to serve on the Care & After Care committee which was formed in April, following an Organisation and Methods survey under the National Health Service section, to discuss the type of equipment which should be made available to patients on a loan basis. Careful consideration has been given to the various items to be purchased and visits were made to the Northern General Hospital and a firm of surgical equipment manufacturers to see at first hand the different kinds of beds, wheelchairs, walking aids and lifting hoists available in in order to budget to the best advantage. The home nursing staff and patients are very pleased with the new high/low adjustable beds and new wheelchairs, as well as useful smaller items which have been secured for nursing patients at home.

The Superintendent also accepted an invitation to join the Sheffield Old People's Welfare Committee which seeks to co-ordinate services for the care of the elderly, with a function of investigating any special need, assisting with care in sickness and providing friendship whenever possible. Assistance was also given to the Queen's Institute of District Nursing research section, which is currently examining the "Study of the State Enrolled Nurse in the Community Nursing Services."

Conclusion.—The recommendations of the 'Committee on Nursing' (Briggs) are awaited with interest and the expected government proposals for a unified health service will undoubtedly have some bearing on the future of community nursing. There is need for improved services complementing, and in some instances replacing, institutional care for the sick, elderly and disabled. The home nursing service is already adapting and expanding to meet the changing needs, and the situation at the end of 1970 is not necessarily a depressing one. With improved resources for general administration and training the service has a future where home nurses can play a vital role in a more closely knit health service.

The following figures detail the work carried out by the staff during the year:—

Number of cases on the register at 1st January, 1970	2,674
Number of new cases attended by the nurses during the year	6,334
Total number of cases attended by nurses during the year	9,008
Number of cases removed from the register during the year	6,198
Number of cases on the register at 31st December, 1970	2,810
Number of visits made by the nurses during the year	295,413

VACCINATION AND IMMUNISATION

By J. J. McKessack, M.R.C.S., L.R.C.P.,
Departmental Medical Officer

"I am at war 'twixt will and will not"
William Shakespeare (Measure for Measure)

The revised immunisation schedule which came into operation in October 1968, has remained the basis for mounting a combined operation of increasing complexity. Rubella vaccine has recently become available and was initially offered to girls aged 13 years.

Age	*Vaccine*
4 months	Triple (diphtheria/whooping cough/tetanus) Poliomyelitis
6 months	Triple/poliomyelitis
12 months	Triple/poliomyelitis
15 months	Measles
16 months	Smallpox
5 Years (or school entry)	Diphtheria/tetanus, poliomyelitis
4 weeks later	Smallpox re-vaccination
11 years	B.C.G.
11-13 years (girls)	Rubella
14-15 years	Tetanus/poliomyelitis
4 weeks later	Smallpox re-vaccination

Routine immunisation sessions are held at maternity and child welfare centres for pre-school children and at school clinics for children of school age. Members of staff visit schools for tuberculin testing and B.C.G. where indicated.

Measles Vaccination.—It was recommended that measles vaccine be offered to all children up to and including the age of 15 years, who have neither been immunised nor had the natural disease. The vaccine used contains a live attenuated measles virus of the Schwarz strain and is not offered to children below the age of nine months, since they are partially protected by the presence of maternally derived antibody and its presence may result in failure to respond to vaccination. Supplies of measles vaccine are sufficient to comply with present demands.

Measles vaccination.—Number of persons vaccinated:—

		Age Groups	
At maternity and child welfare centres	3,995	0—4	5,559
At school health clinics	337	5—15	1,029
By general practitioners	2,259	Over 15 years	3
TOTAL	6,591		

A measles eradication campaign beginning in November is described in the section on infectious diseases. (p. 24)

Rubella Vaccination.—A trial of rubella vaccine RA 27/3, Burroughs Wellcome, was carried out on 13 year old schoolgirls in June 1970 and is described in detail in the section on infectious diseases. Trials of this type carried out in Sheffield and other areas are of major importance in the field of preventive medicine. The protection afforded by immuno globulin is very variable, sometimes giving no protection at all and, although the search for a suitable vaccine has taken many years, such vaccines are now available. The precarious hope of the schoolgirl 'catching german measles' so that immunity acquired might protect her foetus from infection during pregnancy in later life has now been replaced by a safe, effective vaccine capable of providing this protection without the risk of the infection spreading to other female members of the family. It was gratifying to see a satisfactory level of response to rubella vaccine administered by 'Ped-o-Jet' to a large cohort of 13 year old schoolgirls. (see also p. 22)

Smallpox Vaccination.—Revaccination is now recommended at school entry and at 14-15 years since it is not considered desirable to carry out primary vaccination against smallpox either at school entry or later in school life because of the greater risk of encephalitis.

The number of primary vaccinations has continued to decline to the level of that in 1961, but that of revaccination is rising, especially in the 5-14 year old. The latter may reflect new vaccination policy with booster offered at 5 and 15 years or the influence of the facility of foreign travel.

Yellow Fever.—Under the International Sanitary Regulations vaccination against yellow fever can be afforded any person who intends to visit areas where this disease is endemic. Sheffield is a designated vaccination centre and sessions are held each Tuesday between 4.00 and 5.00 p.m. by appointment at Orchard Place Welfare Centre, Sheffield, S1 2GW (Tel. 78944). The fee for this vaccination is £1·05. The International Certificate is valid for 10 years beginning ten days after vaccination or on the day of revaccination.

	1967	1968	1969	1970
Persons vaccinated	494	644	609	660

Where protection against yellow fever and smallpox is required, it is recommended that primary smallpox vaccination should be given at least 21 days before the yellow fever vaccine but, if yellow fever vaccination is given first, primary smallpox vaccination may follow 4 days later.

Immunisation for travellers abroad.—The medical officer on duty for immunisation is all too frequently faced with a situation in which he has to adjust the various immunisation intervals so that the margin of safety is minimal and the immune response unsatisfactory. This situation may arise when the traveller has not been informed what the basic immunisation requirements for particular destinations are, but quite often he has the requisite information but delays the actual immunisation until a few days before embarking.

A short course of immunisation frequently used in these circumstances is as follows:—

Day	
1	Yellow Fever, Cholera (1), and Oral Poliomyelitis
5	Smallpox, TABT(1)
11	Cholera (2)
13	Read Smallpox vaccination
28	TABT (2), Poliomyelitis (2)

TABT (3)—some months later

Poliomyelitis (3) should be given 4 weeks after dose 2.

It may be that in the future B.C.G. will be included, for the benefit of the young adult who has not had B.C.G., is not immune and who wishes to travel to Asian or African countries where the incidence of tuberculosis is still high.

Towards the end of the year a national shortage of cholera vaccine engendered by unusual demands from Turkey, Biafra and other 'stricken areas' resulted in the Public Health Department assuming the responsibility for the provision of this protection to all travellers visiting endemic areas or countries where certified protection against cholera was a condition of entry.

This crisis is now resolved but it is proposed to hold a small stock of vaccine at the Central Clinic, Orchard Place, to cover any future 'major incident' requirements.

Diphtheria, Whooping Cough and Tetanus.—The following table indicates the number of children under 16 years of age who received a full course of protective immunisation. The lower figures since 1968 reflect the fact that the course of immunisation is not now completed until 12 months of age.

Primary Course	1968	1969	1970
Diphtheria/whooping cough/tetanus	7,122	3,820	6,389
Diphtheria/tetanus	352	323	203
Tetanus toxoid	210	333	215
Booster Doses			
Diphtheria/tetanus	4,755	2,818	2,904
Diphtheria/whooping cough/tetanus	4,955	4,269	2,351
Diphtheria	37	28	21
Tetanus	903	1,044	1,558

The contribution made in 1970 by the various branches of the health services is indicated with special reference to diphtheria.

	Primary	*Reinforcing*
By general practitioners	2,336	2,677
At maternity and child welfare centres	4,052	620
At school health clinics	185	1,993
At hospitals	26	1
TOTALS	6,599	5,291

Poliomyelitis.—The programme of immunisation against poliomyelitis in school children has been favourably maintained in 1970. Immunisations in the 0-4 age group rose from 3,686 in 1969 to 6,100 in 1970, an increase of 2,424 in completed courses. Reinforcing doses, although fewer, represent a figure approximating to the level in 1968 and 1969.

The package tour of the tropical or sub-tropical countries increases the facility to travel abroad. Price reductions designed as an enticement to travel in the 'off season' period may further increase the number of travellers. Such opportunities in turn increase the need for maintenance of a high standard of protection, not only for the holiday makers, but also for those at home when the traveller returns.

B.C.G.—Full details of B.C.G. vaccination are given in the section dealing with the prevention of tuberculosis (Page 65).

AMBULANCE SERVICE

By F. C. Kelsey, F.I.A.O.,
Chief Ambulance Officer

"Wash me, and I shall be whiter than snow"

Psalm 51

A new purpose built Ambulance Station situated on the Batemoor Road, Norton, became operational on the 26th January 1970. The value of having a station on the southern periphery of the City quickly became apparent in respect of the quicker attendance at emergency incidents and the saving of time and mileage in conveying admission cases and out-patients to hospital.

The number of patients carried during the year increased by 4,565(2%) and the mileage travelled by 64,112(6·7%). These figures would have been greater but for instances of industrial action when, on certain days, out-patients were not conveyed.

The Weston Park Hospital became operational in April, a geriatric 'day hospital' at the Northern General Hospital opened in November and the Winter Street Hospital re-opened for geriatric patients. These developments, together with additional requests for transport for geriatric and psychiatric day patients, increased the commitments of the Service.

In October and December the day section staff disrupted the service by industrial action in support of a pay claim resulting on two occasions in a total of 750 out-patients not receiving hospital treatment and delays for all out-patients on a third occasion.

A series of electricity cuts in December affecting both the lighting systems and radio communications caused difficulties which had to be surmounted.

The control staff continued to deal efficiently with the increased amount of work, and the support given by the Ambulance Liaison Officers at the Northern General and Hallamshire Hospitals resulted in an improved service both to patients and to the various hospital clinics. The increased understanding and mutual co-operation between the hospital personnel and the ambulance staff is very gratifying, and this relationship has facilitated smoother working arrangements.

Following a recommendation made by the Working Party on Ambulance Training, a Training Officer was appointed to the Service in July. His duties include the introduction of new entrants to the local conditions of service, operational and administrative procedures, a knowledge of other local and ancillary services, first aid training and the use of equipment. He is also responsible for arranging further training courses for operational staff, and for lectures and demonstrations in ambulance-aid to interested organisations.

The installation of an automatic ambulance washing machine in October has taken away the drudgery of manual washing outside the garage in all kinds of weather. The new machine is under cover, and is operated by a garage handyman, thus releasing two drivers for ambulance duties.

During the year a pain relieving equipment known as "Entonox" was introduced on a trial basis in order to evaluate its efficacy. The equipment provides a mixture of nitrous oxide and oxygen in similar proportions to that used in maternity cases. This provision of the means to alleviate pain has given much satisfaction to the ambulance personnel, who, hitherto, have had no such aid at their disposal.

Statistics.—Table 1 shows the continued increase in the number of cases carried and the mileage covered as compared with 1969 and Table 2 a similar trend over five yearly intervals since the inception of the National Health Service.

Table I

On whose behalf	*Year 1969* Number of patients carried	*Year 1969* Mileage run	*Year 1970* Number of patients carried	*Year 1970* Mileage run
Sheffield City Council	222,889	954,296	227,488	1,019,874
West Riding County Council	232	2,488	221	2,239
Derbyshire County Council	26	509	15	182
Other Authorities	47	1,982	35	1,092
TOTALS	223,194	959,275	227,759	1,023,387

Table II

Year	*Number of patients carried*	*Mileage run*
1949	98,649	481,282
1954	136,847	548,313
1959	159,574	613,056
1964	177,420	738,468
1969	223,194	959,275
1970	227,759	1,023,387

Emergency Calls.—Ambulances conveyed 15,595 emergency casualties to hospital as a result of either accident or sudden illness, and maternity cases booked for hospital confinement.

Long Distance Journeys.—The service conveyed 134 patients a total distance of 23,409 miles by road, and arrangements were made to convey 113 patients by train, with a resultant saving to the ambulance service of 19,117 miles. Members of the British Red Cross Society again acted as escorts to patients who were unable to travel alone by train. The arrangement continued to operate whereby Sheffield ambulances met patients from neighbouring authorities at the Sheffield railway station and conveyed them to a hospital in the City for treatment, and then returned them to the station for their journey home.

Domiciliary Midwifery Services.—820 requests were received for the services of a midwife between the hours of 7 p.m. and 8 a.m., and the appropriate midwife was informed and transport was provided on 595 occasions, mainly for pupil midwives. Many patients who would otherwise have had their baby at home were conveyed to the recently opened General Practitioner Unit at Nether Edge Hospital.

Flying Squad Journeys.—Ambulance transport was provided on 107 occasions to convey an emergency obstetric team and apparatus to a patient's home, in order that expert medical attention and, if necessary, a blood transfusion could be provided before the patient was moved.

Emergency Welfare Service.—Transport was arranged on 21 occasions during the night hours for a nursing auxiliary to provide emergency care for old people in their own homes until more satisfactory provision could be made the following morning.

Staff.—At 31st December 1970, the staff establishment was as follows:—

Senior officers	2
General administration ...	4
Appointments staff	3
Switchboard operator ...	1
Station officers	4
Station officers (Training) ...	1
Shift leaders	11
Leading drivers	3
Rotary shift drivers ...	58
Alternating shift drivers ...	8
Day rota drivers	62
Handymen and cleaners ...	10
TOTAL	167

Training.—During the year 10 drivers attended the six weeks' course in ambulance aid at the West Riding Training School at Cleckheaton, and the number of serving personnel now in possession of a certificate of efficiency awarded by the Ambulance Service Advisory Committee is 88.

A team of 3 men was again entered in the national ambulance competition for local authority ambulance services. The regional round consisting of 16 teams was held at Scunthorpe in June, and the Sheffield team gained third place. Our attendant gained the highest number of marks in the test and represented the Region in the national final, but he did not gain an award.

In December another Shift Leader successfully completed an Instructors' Course sponsored by the Department of Health and Social Security at Wrenbury Hall, Cheshire. There are now three qualified instructors in the Service. Local induction training on a voluntary basis continued during the year and all students passed the appropriate British Red Cross Society examination. Mr. R. A. Elson, Consultant Orthopaedic Surgeon at the Northern General Hospital, has taken a keen interest in the work of the service and permission has been received for an ambulanceman to spend a week at the hospital in order to gain some knowledge of the management of patients inside the hospital. The programme allows for a day in the operating theatres, casualty department, maternity unit, and a half day in the X-ray department, physiotherapy department, geriatric day hospital, and the occupational therapy department. The staff who have been privileged to attend so far have enjoyed the experience and have gained a new insight into the work and responsibilities of the various departments. This will undoubtedly lead to a better understanding of other people's problems. The course follows a recommendation made by the 'Millar' Working Party on Ambulance Training.

Safe Driving.—113 drivers were entered for the 1970 Safe Driving Competition and 88 qualified for awards as follows:—

Silver Bar (25-30 years)	1	Bar to 5 year Medal (6-9 years)	14
Star Bar (21-24 years)	2	5 year Medal	4
Special Bar (16-19 years)	3	Diplomas (1-4 years)	59
Oak Leaf Bar (11-14 years)	5		

25 drivers were withdrawn from the competition or failed to qualify.

Vehicles.—At 31st December 1970 the fleet comprised 62 vehicles:— 5 Ambulances (2 men), 34 Dual-purpose vehicles and 23 Omnicoaches and sitting case vehicles.

The maintenance and servicing of the fleet was carried out by the staff of the Welfare Services Transport Repair Workshop.

During the year six ambulances and six omnicoaches were replaced by new ones, and the fleet was increased by three omnicoaches, making a total of 63 vehicles. Unfortunately one omnicoach was badly damaged in a road accident and had to be written off, thereby reducing the fleet to 62 vehicles.

After many years of using B.M.C. vehicles, it was agreed that the engine installed in the B.M.C. ambulance chassis was not powerful enough to cope with the topography of Sheffield, especially when used on emergency work. It was therefore decided to purchase six ambulances built on the Ford 'Transit' chassis which has a slightly more powerful engine. These vehicles have proved to be very satisfactory in performance and popular with the drivers.

Public Relations.—Talks and demonstrations were again given to over 2,000 members of interested groups and organisations, including student teachers, pupil midwives, hospital staffs and police cadets.

Social and Recreational Events.—A lively sports and social club is run by members of the Service, but it is hampered by lack of accommodation for both indoor and outdoor activities. There is a flourishing football section and also sections for darts, table tennis and rifle shooting. Fishing matches are arranged periodically and teams compete

for the ambulance services national trophies. Social activities include an annual dinner dance, occasional social evenings, motor coach trips, and car treasure hunts. The children of the ambulance staff and a number of orphans are taken to the seaside for a day in the summer and they are also entertained at a Christmas Party. The officials of the club are endeavouring to promote a spirit of comradeship and friendliness within the service and this is a thing to be encouraged.

CARE AND AFTER-CARE

"I reckon being ill as one of the greatest pleasures of life,
provided one is not too ill and is not obliged to work till one is better"

Samuel Butler (The Way of All Flesh)

Under Section 28 of the National Health Act 1946, provision has been made for a variety of care and after-care services. Those relating to the tuberculous are referred to on page 64 and the after-care of mental illness on page 80. The service for the supply of incontinence pads, introduced in 1965, expanded still further during the year. Other services provided are chiropody, arrangement of convalescence holidays, 'meals on wheels' and the loan of nursing equipment.

CHIROPODY

The chiropody service has been operating since July 1960. Treatment is restricted to the elderly, the physically handicapped and expectant mothers. When applications for chiropody are received, a health visitor calls on the applicant, explains the scope of the scheme, makes an assessment of the degree of priority and decides whether domiciliary or clinic treatment is called for. Whenever possible, anyone making an application at the centres in person is seen by the health visitor at the time.

The demand for the service has increased steadily since its inception. Compared with the 1,947 patients receiving treatment at the end of 1961 (the first full year of the service), there were 5,900 patients at the end of 1969 and 6,222 patients at the end of 1970. During 1970, 1,611 applications were received, of which 5 were not recommended. At the end of the year there were 292 patients awaiting a first treatment at the clinics and 51 domiciliary patients awaiting their first treatment.

In April 1963, the City Council took over the chiropody service provided by the Council of Social Service in their clubs for old people.

The physically handicapped attending the centres at Manor and Firth Park are given treatment at the clinic sessions held at these centres, and also at Kelvin Welfare Centre where a weekly session commenced in August, 1970. A weekly session is held at Psalter Lane handicapped persons centre.

One full-time and one part-time chiropodist resigned during the year and five part-time chiropodists were appointed. At 31st December, the staff consisted of four full-time chiropodists and, in addition, 10 part-time chiropodists working a total of 44 sessions weekly.

Sessions were arranged weekly as follows:—

	31*st Dec.* 1968	31*st Dec.* 1969	31*st Dec.* 1970
Orchard Place	12	14	15
Manor	7½	9	10
Firth Park	8	8	8
Birley	—	—	2
Frecheville	2½	2	2
Greenhill	3	3	4
Hackenthorpe	1	1	—
Hyde Park	2	2	2
Kelvin	—	—	1
Newfield Green	2	2	2
Southey	2	2	2
Walkley	1	2	2
Wheata	1	1	1
Psalter Lane	—	1	1
Clubs	—	3	4
Domiciliary	38	31½	28
TOTALS	80	81½	84

The number of patients treated and treatments given during the year were as follows:—

	No. of Patients	*First Treatments*	*Subsequent Treatments*	*Total Treatments*
Orchard Place	1,223	268	4,894	5,162
Manor	859	145	3,201	3,346
Firth Park	797	93	2,747	2,840
Birley	146	50	380	430
Frecheville	112	11	453	464
Greenhill	249	62	849	911
Hyde Park	124	29	520	549
Kelvin	95	44	126	170
Newfield Green	164	5	580	585
Southey	78	26	651	677
Walkley	132	25	587	612
Wheata	65	7	291	298
Psalter Lane	63	10	66	76
Clubs	250	88	1,046	1,134
Domiciliary	1,894	454	2,586	3,040
Council of Social Service ...	182	—	625	625
TOTALS	6,433	1,317	19,602	20,919

PROVISION OF NURSING REQUISITES FOR PERSONS NURSED OR CONFINED AT HOME

Nursing requisites are available for loan either from depots directly under the administration of the City Council or from certain voluntary organisations acting as agents of the Authority. These depots are established at the Orchard Place, Firth Park and Manor Maternity and Child Welfare Centres, at the Johnson Memorial Home and at Norton Rectory. The voluntary agencies, participating in this scheme are the Sheffield and District Convalescent and Hospital Services Council (89/91 Division Street), the Darnall and District Medical Aid Society (Fisher Lane, Darnall) and the British Red Cross Society (53, Clarkegrove Road). Articles are loaned free of charge. There is no limitation on the period for which articles may be loaned but the application must be renewed at three monthly intervals.

Incontinence Pads.—A service for the supply of incontinence pads commenced in May, 1965. It was realised in planning the service that the disposal of soiled dressings in houses subject to smoke control orders would present considerable problems and in consequence it was decided that a delivery and collection service should be provided. Water-proofed paper bags were supplied for the soiled pads and these were taken to the Cleansing Department's destructor for disposal. Information concerning the service was circulated to all general practitioners and the Department's nursing services. Home nurses or health visitors recommending this service were asked to indicate the number of pads required daily and, when a recommendation came from other sources, it was arranged that a health visitor should visit and assess the need. Since January, 1966, alternate day delivery has been in operation over the whole City.

The number of patients on the delivery list rose from 393 to 461 during the year and the total number of patients who had benefited from the service was 1,415 compared with 1,309 in 1969. The average number of pads issued daily was three per patient and the total number of pads issued during the year was approximately 360,000. At the end of the year there were eight daily rounds with approximately 70 calls on each round: these calls included some cases where soiled dressings were collected.

In August, 1966, the incontinence pad service was extended to provide protective panties and interliners to certain categories of patients, e.g. those suffering from paraplegia or disseminated sclerosis who, although ambulant, require protective clothing, and from May, 1970, these facilities were also made available for pupils suffering from spina bifida and other similar conditions, who attend Oakes Park or Mossbrook special schools, whilst in school and at home during the school holidays.

CONVALESCENCE FACILITIES

These are provided for persons who have been ill, but whose active period of treatment is over, and for those who suffer from chronic ailments. A weekly charge scale is laid down, the amount payable being assessed according to family income. Patients are accepted for an initial period of two weeks, with provision for extending this if recommended by the medical officer of the convalescent home. During the year there were 202 admissions (65 males, 137 females) including 28 married couples compared with 162 admissions (39 males, 123 females) in 1969. There were 54 patients below retirement age (23 males, 31 females) and 148 who were above retirement age (42 males, 106 females). Of these patients 62 had been for convalescence on one or more occasions previously by arrangement with the Department. The majority of applications were received during the summer months and the convalescent homes used were the same as in previous years.

MEALS ON WHEELS

A comprehensive service of "meals on wheels" was inaugurated in April, 1959, after a pilot scheme had been in operation for some time. The Sheffield Council of Social Services undertake the cooking and distribution of the meals, whilst the local authority finance the scheme and provide the transport. The number of vehicles provided by the local authority was ten.

At the end of the year, the number of persons receiving meals was 1,137. Two meals were provided for each person per week and over the year 116,617 meals were served. The service is particularly beneficial to elderly people who have been discharged from geriatric units and others who are wholly or partially housebound on account of frailty or infirmity. Special diets are provided where necessary.

TUBERCULOSIS CONTROL

By J. J. McKessack, M.R.C.S., L.R.C.P.,

Departmental Medical Officer

"When your neighbour's wall is on fire, it becomes your business"

Horace (Epistles)

Notified cases of pulmonary tuberculosis in 1970 were 97 compared with 116 in 1969: non-pulmonary cases were 40 compared with 32 in 1969.

The following table illustrates the numbers of new notifications, the incidence per 100,000 of population, and the total number of deaths:—

Notifications and Deaths

Year	*Pulmonary*	*Incidence per 100,000*	*Other forms*	*All forms*	*Deaths*
1965	174	36	30	204	23
1966	172	35	24	196	35
1967	133	25	28	161	13
1968	159	30	30	189	16
1969	116	22	32	148	18
1970	97	18	40	137	20

Immigrants.—35 immigrants, 22 of whom came from Pakistan, were notified as suffering from tuberculosis in 1970. Of the total number of notifications of pulmonary tuberculosis, 19% were immigrants. Details of these, by country of origin, are shown in the appendix on page 126.

Transfers in.—A total of four cases previously notified in other areas came within the City boundary during the year—all were males and three were pulmonary. Two were immigrant transfers.

Liaison Meetings.—Quarterly meetings of the Liaison Committee, under the chairmanship of the Deputy Medical Officer of Health continue to be held attended by Dr. R. H. Townshend, consultant chest physician, Dr. J. Lorber, Reader in Child Health from the Children's Hospital and other medical and nursing officers of the health department. These meetings bring together those interested in, and concerned with, the prevention and control of tuberculosis.

Chronic Positive Register.—Dr. R. H. Townshend, consultant chest physician writes:— "Chronic active cases of pulmonary tuberculosis as at 31-12-70—Sheffield cases 8.

Comparative figures:—

1963	1964	1965	1966	1967	1968	1969	1970
69	56	48	39	31	26	17	8

Nine new cases were added to the list during 1970, nine cases converted to sputum negative during the year and two chronic positive cases died during the year."

Contact Tracing.—Examinations and/or X-ray of contacts were carried out at the following centres:—

Chest Clinic Royal Infirmary	421
Children's Hospital	1
Mass Radiography Centre	175
Other hospitals	7
Total	604

The results of these 604 cases are:—

No abnormality found	592
New cases notified	6
Recalled for further investigation	6

Rehousing.—During the year seven positive cases of tuberculosis were recommended for re-housing. As on 31st December, 1970 there were 220 such families living in Corporation houses, having been granted priority rehousing on medical grounds. 8 cases which recovered during the year are being allowed to continue their tenancies.

Provision of Equipment.—Patients suffering from infectious tuberculosis and treated at home, are loaned such items of equipment as mattresses, sheets, blankets and pillows.

Care and After-Care.—After treatment many patients were unable to return to their previous employment. Some were referred to the local authority centre at Psalter Lane until January 1970 when the T.B. Group was discontinued and the patients were absorbed into the remaining groups of handicapped persons; some are placed at the Remploy factory in Sheffield, while others are found employment through the Disablement Resettlement Officer of the Department of Employment and Productivity.

Special Investigations.—(1) A girl aged 10 years was admitted to hospital following a severe attack of measles. Clinical examination, chest X-ray, Mantoux testing and laboratory investigation failed to reveal any alternative cause of the febrile illness. Eventually, however, she was shown to be suffering from miliary tuberculosis and despite anti-tuberculosis therapy the patient died. The association of tuberculosis as a complication of measles (or whooping cough) is recognised in as much as a previous primary lesion may be re-activated. A tuberculin skin test may be suppressed in the presence of measles and may not be positive in acute miliary tuberculosis.

(2) In January of 1970 the number of positive Heaf reactors in certain schools was much lower than would be expected, i.e. 1·4% Heaf I and 0·6% Heaf II in 694 pupils (no previous B.C.G.). It is of course recognised that there is a seasonal variation for this phenomenon. In February the rate rose to a level more in keeping with previous years. The same batch of P.P.D. was used throughout and any opened bottles were discarded at the end of each school sessions. Measles was prevalent at the time and possibly accounted for some of the low readings. Our main interest lay with 46 children who wanted to be revaccinated and who had received previous B.C.G. These were followed up and showed a moderate degree of acceleration, the average induration being 12 to 14 m.m. There were no complications of lymphatic involvement or clinical discomfort.

(3) A nine year old mentally handicapped boy, whose mother had been notified in 1942, was re-notified in April 1970 and his three year old sister was notified in June. The children at the school which the boy attended were Heaf tested and only one child had a positive low Heaf reading in a total of 75 tested. The chest X-ray of this pupil was normal.

(4) A 14 year old boy contracted renal tuberculosis which might have been revealed much earlier if his mother had not refused to have him Heaf tested. His deceased father had died of uraemia secondary to an infection contracted in Burma but the pathologist's report did not reveal a Koch's infection. At the boy's school the Heaf rate was 5·7%—2 children were grade III (X-rays showed old calcified non-active foci).

(5) In September, a 23 year old male lecturer in further education was examined by a school medical officer and was repeatedly requested to go for X-ray. He continued to teach up to December and finally went for X-ray of chest which revealed signs compatible with pulmonary tuberculosis. This man was given treatment immediately and allowed to return to work when he had been shown to be non-infectious.

(6) In August, a three year old boy was admitted to hospital with tuberculous meningitis and in December he still remained in a coma. His parents had been admitted to hospital following a car accident and he had been under the care of his grandfather who was found to have active pulmonary tuberculosis.

B.C.G. Vaccination of School Children

The programme of tuberculin testing and vaccinating eleven year old school children has continued:—

Number tuberculin tested	5,444
Positive reactors (Previous B.C.G.)	483
Positive reactors (No. previous B.C.G.)	443
Positive reactor rate (No. previous B.C.G.) ...	8·9%
Negative reactors	4,399
Number vaccinated	4,795

The vaccinated group consisted of 4,395 Heaf negative (no previous B.C.G.), 119 Heaf negative (previous B.C.G.), 281 Heaf I (no previous B.C.G.).

The Heaf rate was divided thus:—

Heaf I = 5·7%
II = 3·0%
III = 0·2%
IV = 0·04%

Since 1964, when it was decided to skin test the 11 year old group of school children, the total Heaf positive rate has fluctuated between 5·6% and 11·9%, being 8·9% in 1970.

B.C.G. Vaccination of Students in Establishments for Further Education

This year, owing to requests by head teachers of schools, for the B.C.G. team to visit at particular times convenient to their academic programmes, some Establishments for Further Education have not as yet been visited. Arrangements are in hand for this to be commenced early in 1971. The response to the B.C.G. programme in the Polytechnic was extremely disappointing and gave rise to some concern. The Student Health Service has now taken over part of this work as a routine investigation in clinical examination of students. This allows for better surveillance and control of groups who may come from many different authorities at home or abroad and who have received no previous B.C.G.

X-*ray of Positive Reactors*

The proportion of positive reactors referred for chest X-ray who attended was 86%.

The results of chest X-rays were as follows:—

Normal film	175
Non-active tuberculous foci	2
Resolving primary hilar shadow	1
Recalled but further X-ray satisfactory	3
	181

THE SOCIAL PROBLEM GROUP

By CATHERINE H. WRIGHT, M.B., Ch.B., D.P.H.,

Senior Assistant Medical Officer, Maternity and Child Welfare

"The authorities were at their wits' end, nor had it taken them long to get there"

Desmond MacCarthy

The two social workers continued intensive family case work in 1970 with some uncertainty as to whether the pattern of their work would change when they became absorbed into the Social Services Department.

During the year 1,621 visits were made to families and 470 interviews with parents took place at clinic premises. The Children's Club, held on two evenings each week, continued to be popular, and parties and outings for children were arranged through the generosity of church groups, University students and, in particular, the Hallamshire Ladies' Circle. During several weeks in summer a succession of families were afforded short holidays in two caravans lent by the Manor Group of Churches.

The social workers have been working for thirteen years with families referred for the most part by health visitors. Intensive case work has been carried out on these families on the assumption that grossly inadequate family units require a specialised kind of parental support over a very long time.

There would appear to be no reason to change this view. It seems doubtful whether the extra attention and provisions focussed on multiple problem families and the more enlightened attitudes which have developed towards them will make any impression on their numbers, bearing in mind that young people least likely to make competent parents now marry young, Morever, some who by reason of mental and physical disabilities would not in the past have expected to marry, now are enabled to do so.

It is easy to define the problem, to understand why parents fail, and how their children in turn will have difficulties in their marriages and childrearing. Likewise it is easy to enumerate the kind of extra provisions which should certainly be made for the children growing up in sociopathic families. But at the end the prospect is a gloomy one for a deprived child as it's parents' inadequacies handed down through several generations cannot be fully compensated for, no matter what efforts are made during the few impressionable years of a child's life.

Second generation problems.—A follow-up of adult sons and daughters of families termed problem families around 1952 to 1954 was completed in 1970. 236 married couples and 213 single adults were the subjects of study.

It was found that a much higher proportion than in the population as a whole had married under the age of twenty—the relevance of this lies in a greater tendency for such marriages to break down and a longer child-bearing span for the wife.

In respect of housing and material goods the second generation are much improved on their parents. This can be regarded as part of a general trend of rising standards of living which works to the advantage of all families. At a time of virtually full employment—1968/9—about one third of the males are poorly adjusted to work and most of the others tied to a low standard of living because they are unskilled workers. This will matter very much if they have large families.

Already it is evident that the families, although mostly young, are tending to rely on Social Security benefits, a situation which is unlikely to improve. Welfare services, dedicated now to preventing family break up, are disproportionately involved with these families and this in spite of the fact that, as yet, most are small. The delinquency rate for the single sibs is high and they are mostly unskilled workers. Like their older sibs they will marry young. Their marriages will be particularly vulnerable because of the vicissitudes and traumatic experiences of their childhood.

Some of the married sibs seem to be well settled and normal. These include a few childless couples, and others where the number of children has been small and the family is apparently complete. A prediction that about one-third of second generation families will merge into the mass of average competent households can fairly be made. It is certain that a further third in respect of the areas investigated are either already problem families in every sense of the term or have started on a course of involvement with helping agencies which is unlikely to be reversed.

Between these two groups lies a middle third which, although well housed and to superficial appearances normal, gives the impression of functioning precariously in terms of marital harmony and work, and therefore of stability, living standards and income. This middle group is vulnerable in the face of the adversities and stresses which any family must expect to meet. What happens in each case will depend on the strengths and weaknesses of the parents' personalities.

Judging by trends already obvious, the number of unsatisfactory families which will arise from the 835 children of the original families, when all have married, will be likely to number not less than 250. In view of the large question mark hanging over the recently married, and because there seems no reason for believing that the second and third wave of married sibs will differ significantly from those first to marry, this is certainly a conservative estimate.

By far the most interesting finding has been that more of the married sons than married daughters are repeating the parental pattern in their own marriages. There are several possible explanations for this.

While the daughters are tending to marry up out of their social class they are likely to be marrying men more stable than either their fathers or brothers. Their brothers, no doubt at a disadvantage among other eligible bachelors, appear more likely to marry into a family similar to their own. The young man who throws up one job after another and has been committed to an approved school will find favour with a girl whose brother behaves in just the same way and who sees nothing unusual in this, or feels perhaps that she alone can give him the understanding and love—the lack of which she may feel has been the cause of his difficulties. He is less likely to be approved by the parents of eligible daughters unless there is a baby on the way.

It may be that the background of a problem family home, bears more heavily on boys than girls and it has been suggested that the pattern of development in personality and behaviour is more stable and more constant in the female than in the male, and can take a larger stress before being disrupted.

Since fathers normally play the dominant role in a family, the father who works irregularly and is unable to provide adequately for his family has a deadly effect on any but the most insensitive and unintelligent wife, and is potentially more damaging to sons and daughters than the failings of a feckless mother.

It would appear, from the findings, that it is preferable for a child to be born into the nest of a problem family daughter than into the nest of a problem family son, and by implication that there is a need to find new ways of helping the male sibs of problem families.

The legacy of unsatisfactory families from the original 120 families, at one in three is alarming because these families were large and the consequence has been a doubling of the number of unsatisfactory families requiring help. This fecundity is a constant characteristic of these families, and for many it must be the most important factor in bringing about their failure.

Parents such as those of the present study usually willingly continue bearing children until they have a son and a daughter, which situation may not be achieved by the third, fourth, or fifth pregnancy. Women from large families, while disinclined to repeat the pattern are seldom inclined to a suggested norm of two children. For the women in the survey child-bearing fulfils a need for identity and, because in most cases they have acquired no particular work skill before marriage, they have little incentive to return to work after marriage.

It is clear that problem families beget problem families, and that for such inadequate families a programme for contraception should be pursued to the limit of acceptibility.

HOME HELP AND HOME WARDEN SERVICE

By Miss D. J. Parker,

Superintendent Organiser

"Ne'er look for the birds of this year in the nests of the last"

Miguel de Cervantes (Don Quixote)

1970 has proved to be a very demanding year for this Service. The 'On Your Conscience Campaign' resulted in many additional enquiries throughout the year, but 894 were received in the first three months alone. Many of the reports presented in the newspaper were found to be exaggerated and incorrect details had been given, but all required time-consuming investigation. The campaign did, however, highlight the need for more practical assistance to people in their own homes.

Strikes by local government manual employees and electricity workers have caused confusion and hardship and added to the work of the helps and wardens. Helps had to prepare extra meals on the day when no 'meals on wheels' were delivered and also on other occasions when the transport services were suspended and handicapped patients were unable to attend day centres. During the electricity cuts it was necessary to try and discover the proposed times of cuts, and arrange work so that the helps and wardens were at the homes of patients at a time when the electricity was on, even if it was an unorthodox time to eat. In addition, they had to ensure they were not caught in a lift when the power was suddenly discontinued. Flasks and hot water bottles were distributed, and the staff made sure that all patients had suitable warm clothing and blankets handy for use in an emergency.

There has been curtailment or cancellation of a number of bus services, increasing the travelling time and inconvenience to home helps.

The telephone situation has not improved and much time has been wasted by helps trying to find a telephone in order to contact the office to report certain changes in circumstances for re-arrangement of assistance. Broken telephone boxes are becoming increasingly common and the repairs appear to be carried out very slowly.

The conversion to North Sea Gas in certain areas posed problems for both the patients and helps, but talks to the helps before the conversion had given them good warning of the problems that would be experienced. They were able to provide meals and warmth for all patients, as required, and adjust their duties to cope with the temporary inconvenience.

The upset caused by the replacement of old fashioned fireplaces in the homes of the elderly patients can be very disturbing and has occasionally necessitated extra help at very short notice.

In spite of all the problems, however, the Service has been provided as usual. 3,315 new requests for assistance were made and after thorough investigation 2,080 applicants were given help. This brought the total number of patients receiving the service during the year to 6,385.

Housebound Patients.—During 1970 assistance was given to 868 housebound patients, 759 over the age of 80 and 109 over the age of 90. Many of these patients need home help or home warden service on a daily basis. As the health of these patients fluctuates, it is necessary to ensure that the correct amount of help is allocated immediately when needed. Therefore, frequent visiting by the organiser is essential for the efficiency of the service.

There are approximately 385 patients over 80 who are housebound simply because no one bothers to take them out so, where appropriate, the home help is encouraged to take them along to the shops and reassure them simply by being with them. These patients benefit enormously from this weekly visit and look forward to the outing, although it is more time consuming than the helps shopping alone.

Laundry service for incontinent patients.—This service has been reduced considerably due to the temporary closing of the Home Help Training Centre. While some facilities were made available at the Talbot Junior Training Centre where the staff were most helpful, laundry could only be carried out for a limited number of our patients. In November 1970 the laundry service was resumed from the Training Centre but transport difficulties have occurred, and there is an increasing need for some laundries to be located in various parts of the City to undertake more laundry services for housebound and incontinent patients locally. During the year 5,663 articles were laundered.

Home Warden Service.—The number of home wardens has increased from 40 to 63 and 23,506 visits have been paid to patients during the year, but there are still large parts of the City without warden service. A 10 day working fortnight was introduced in September to ease what is a very demanding and tiring job. Initially a great deal of work was necessary to re-arrange the programme of duties for all the wardens in order to 'pair' them and allow for two consecutive days' leave, but the new system is appreciated and allows them to plan their leisure time with their families and friends. There have been teething problems but most have now eased. Difficulties have been experienced with shopping, when one warden has been on leave or absent due to sickness, and, ideally, a third warden is needed in each team to cover all eventualities and keep the travelling between patients to a minimum. The wardens work closely together and must develop a harmonious working relationship, so it is essential that those selected have personalities which fit in with the partners with whom they will be working. Much mutual adjustment is required to make the pairing successful and there could be serious difficulties if they were not compatible.

Publicity, recruitment, and training of home helps.—Continuous efforts have been made to stimulate recruitment by the circulation of leaflets, posters, advertisements and exhibitions. Stands were taken at the Job Convention at Aldine Court in June and at the Sheffield Show in September and applications have resulted from these displays.

Unfortunately, two particular factors have contributed adversely to the retention of home helps; the volume of work and shortage of organisers has meant that very little support, guidance or encouragement could be given to the home helps in their actual duties in the households, hence some have begun to feel neglected and have turned to other employment. Helps need to show organisers what has been achieved in the home of a patient to obtain job satisfaction. Time keeping also tends to lapse when helps are not visited regularly.

The Training Centre was closed, due to extensive alterations in the building, until November and the lack of proper induction and training courses has meant that helps were ill-prepared for their duties. Short courses were arranged in the home help offices at the Kelvin Welfare Centre, but accommodation was very limited and it was impossible to include any practical work for the helps. Since November, training courses have again been held at the Training Centre at the Johnson Memorial Home and 96 home helps have attended.

Talks have been given on 'North Sea Gas Conversion' and 'Decimalisation' to enable helps allay the fears and prepare elderly patients for the problems that arise.

Attendance at International Conference at the Froebel Institute, Roehampton.—The Superintendent Organiser and five home helps attended the International Conference which was a great success. The programme covered the personal and practical aspects of community care, practical involvement of the family doctor, hazards in the home, and personal relationships. A resume by all foreign delegates of their own services, enabled the helps to see their work in a much broader concept and made them realise how their duties fit into the overall care of sick people. All the helps attending were appreciative of the opportunity to meet and discuss their work and participated most enthusiastically.

Accommodation.—In November 1970 the long awaited transfer of the administrative centre from Orchard Place to the Johnson Memorial Home became effective. The new, pleasant office accommodation has improved working conditions enormously and has helped to make the volume of work much more bearable. An administrative office and training centre in the same building has eased the frustration of working and travelling between two widely spaced units, and suitable facilities for the recruitment and induction of home helps will aid both recruitment and retention.

An area office has also been transferred from the old, cramped quarters in Walkley to the new purpose built premises at the Kelvin Welfare Centre. Again the staff have appreciated their new office accommodation and the modern kitchen facilities. From the helps' point of view it has been very beneficial in providing a room for display study, for meetings, and waiting accommodation. It affords them privacy in their interviews with their organisers, and they have used this facility increasingly to transmit information to the benefit of their patients.

Rapid development is taking place in Sheffield as the old type property is being demolished and large blocks of flats are appearing everywhere. The establishment of a home help office close to the residence of many elderly patients enables them to visit the organisers more easily and discuss their problems.

Liaison with other services.—There has been steady improvement in liaison with other services as the year has progressed following positive and constructive meetings. Where personal contact is possible, this provides an excellent opportunity to explain the purpose of our service and the particular priorities that must operate when requests greatly exceed the help available. The housing of other welfare workers in the same building, or in close proximity, facilitates the arrangements for the various services. Co-operation has improved between hospital social workers and this service, especially in the geriatric field, and this is particularly helpful as assistance is frequently required when patients are discharged from hospital. Medical social workers now appear to be much more aware of the problems and difficulties affecting patients who obviously require a considerable amount of help, and will discuss and in some cases delay discharge until adequate arrangements can be made.

Staff.—This has been a most dis-heartening year for the organisers and clerical staff. All the factors outlined earlier in my report have combined to exert great pressure on the organisation of the service and it has been easy to understand why some staff could not absorb the increasing volume of work. In the last two years, 11 organisers and 18 clerks have resigned out of an establishment of 31. These losses have also had their repercussions on helps and patients, none of whom take kindly to a succession of inexperienced organisers. Constant changes in staff make efficient organisation of the service extremely difficult and in some cases impossible, and this problem will not be solved until trainee organisers are supernumerary to the establishment, and are fully trained before being expected to fill vacancies.

HEALTH EDUCATION

By F. St. D. Rowntree, F.R.S.H., M.R.I.P.H., M.I.P.R., M.I.H.E.,
Health Education Organiser

"Education is not that one knows more but that one behaves differently"

John Ruskin

Individual behaviour is one of the greatest determinants of health or disease and, as health education is one of the most important factors affecting behaviour, it will continue to develop as a major tool in preventive medicine.

Health education is more than the mere provision of information about health or disease. It represents the sum total of all of the influences affecting an individual's knowledge, attitudes and behaviour in health matters. These influences are at work from the moment of birth and throughout the remainder of life. The first basic attitudes and behaviour patterns are established as a result of home influences, later being supplemented by formal teaching in the schools and by the impact of the community's beliefs and practices in health matters. Thus, everyone contributes to the health education of children, particularly parents and teachers whose influence is paramount in the early years.

The Health Education Service seeks to support and co-ordinate health education influences from all sources with the objects of reinforcing existing good health, promoting and encouraging the adoption of new patterns of healthy behaviour, and eliminating those which have an adverse effect on health.

WORK OF THE HEALTH EDUCATION CENTRE

The Health Education Centre continued to provide an administrative and logistical base for the health education work of the Department. In addition, because of the special facilities available there for meetings, lectures, filmshows and exhibitions, the Centre also carried out a programme in its own right. During the year nearly 500 meetings or group visits took place for young children, adolescents, youth and community organisations, and professional groups. Among others who visited the centre were teachers, members of the medical and nursing professions, clergy and youth leaders, all seeking health information or advice. Special activities included:—

The production and loan of teaching aids and equipment.—A large stock of visual aids of all types is held at the Health Education Centre. These are available on loan to anyone able to contribute to the health education programme. Suggestions from visitors and staff were welcomed and in many instances were developed for wider use in the programme.

In the early part of the year a large permanent exhibition telling the "Wonderful Story of Life" was opened at the Centre. The whole process of reproduction from conception to birth was outlined in a series of large size display panels. The exhibition has proved of great value for teaching school children, ante-natal mothers and fathers, and groups of parents and children who have visited the exhibition together. It is proposed that the exhibition, which is situated in part of the main lecture theatre, should be developed during the coming year to include other aspects of the working of the healthy body.

Health Education Information Service.—Requests for advice, background notes and factual information were received from professional workers, students, the general public, and press, radio and television.

The Health Education and Information Bulletin.—Publication of the monthly Health Education and Information Bulletin continued and included special issues on: 'Reforms of Local Government and Health and Social Services', 'Cancer' and 'Heart Disease', in addition to the regular general issues. A useful attribute of the Bulletin is that individual articles and papers can be reproduced for class and group use in school and other courses.

THE HEALTH EDUCATION PROGRAMME

In addition to the broadly based programme of health education covering all aspects of mental, physical and social health related to the needs of individuals and groups at all ages and stages at home, work, school and leisure, certain topics, because of their special importance, received particular attention. These included:—

Preparation for parenthood.—The staff of the Maternity and Child Welfare Service provided teaching during ante and post-natal classes held at day-time clinics throughout the City and during day and evening sessions at the Centre. Classes to which fathers and other interested members of the family were invited took place in the evenings. In addition, an increasing number of schools now utilise the services of health visitors and midwives to provide up to date and authoritative teaching in courses arranged by their home economics departments. These activities are mutually beneficial, adding interest to the schools' work and at the same time providing an opportunity for pupils to meet the staff who, in a few short years, will be responsible for their own ante and post-natal care.

Health Education of Young People.—Properly and scientifically conducted health education for young people is an investment in the future health of the nation since the adoption of unhealthy practices in youth can lead so often to illness or even early death in adulthood. Each year, additions are made to our knowledge of the behavioural determinants of disease and, if the unnecessary and costly burden of health is to be reduced, efforts must be concentrated on the younger generation not only for their own benefit but also to enable them in turn to improve the standards of care and parental responsibility for future generations.

In addition to broad spectrum health education relating to general well-being, the City has for many years pioneered progressive programmes of health teaching dealing with special health hazards connected with smoking, alcohol, sex behaviour and relationships, venereal disease and drug misuse. All can create problems which face young people at an early age and with which the majority of adults have little familiarity. Courses for young people are provided in co-operation with head teachers and their staffs at schools or at the Health Education Centre, the object of which is to enable the young people concerned to make *informed* decisions about health behaviour with particular regard to special hazards. Unfortunately, there still remains a hard core of unenlightened resistance in some quarters where education for earning a living takes precedence over education about the problems of living and remaining alive. Many excuses are offered for this apathy, such as education about health hazards being unnecessary or that it should be left to the parent. Such appalling disregard of the health needs of young people or the beliefs of parents, given the opportunity to express them cannot go un-challenged and must be accepted by health educators as one of the major barriers to be overcome in providing children with the essential information they need to make informed judgements about health behaviour.

Health Education for Adults.—Health education related to the personal health needs of adults including the elderly is provided at meetings arranged for community groups from all parts of the City, and health education topics are a regular inclusion in the annual programme of events of many organisations. Unfortunately, all too many adults do not belong to formal organisations and can only be reached impersonally through the press and the broadcast media or through their contacts with other members of the public who are better informed in health matters. It is hoped that in time, there will be a generally increased awareness of the need to accept personal responsibility for health as more members of the public realise the importance of their own behaviour in determining the quality of their health experience through life. The apathy of many sections of the community in the adoption of healthy habits of behaviour or in taking advantage of the preventive health services which are available such as immunisation, health screening, cervical cytology and mass radiography, leaves much to be desired. Likewise, their failure to make proper use of health services in time of need is a matter of concern. All too often warning signs of impending illness are ignored,

competent medical advice only being sought when a condition has become well established or advanced. These aspects of personal responsibility are stressed at all meetings with adults as is the example they set to children in their formative years.

Because of the contribution parents can make to the health education of their children opportunities are provided for them to see the films and other teaching materials used in schools and youth groups. This enables them to gain an insight into the reasons underlying the need for education in subjects formerly believed to be controversial such as venereal diseases, drug abuse and sex education, and at the same time acquire a vocabulary of terms which facilitates discussion of these problems with their children. This co-operative approach has been used since the establishment of the Health Education Service and has been a major factor in avoiding the ill-informed controversy which has been so apparent in some other parts of the country.

Personal and Family Health.—The staff of the personal health services provided health teaching to individuals and families during routine visits to homes and in their contacts with the general public. Officers from this service also actively contributed to the group teaching programme.

Environmental Health.—Individual health education advice was provided by the public health inspectorate during routine visits to homes, factories and offices. Inspectors also took an active part in the group teaching for schools and community groups.

MAJOR CAMPAIGNS

In addition to consolidating the work undertaken in recent major campaigns and in following up earlier work certain other subjects received special attention. These included:—

Home safety.—The Sheffield Home Safety Committee, re-formed in 1969, elected an executive made up of professional and voluntary workers with special experience and skills, and gave them the responsibility of developing activities. A series of working parties was formed to consider: the arrangement of local campaigns, the development of speakers' panels and their training, and the production of a Sheffield Home Safety Handbook. These activities were undertaken during the year, in addition to which arrangements were made to undertake research into the incidence and causes of local home accidents and the development of a teaching aids collection.

The Committee made arrangements for the purchase of films and other visual aids. Poster and leaflet campaigns also took place together with lectures, filmshows, broadcasts and press publicity.

At the Committee's Annual General Meeting it was agreed that steps should be taken to encourage individual and corporate membership with a view to widening the number of people actively involved in the campaign to reduce the numbers of mutilations and deaths caused by lack of attention to safety factors in the home.

Health Education Concerning Special Handicaps and Disabilities.—For the past ten years education for and about specially handicapped or disabled groups has been arranged for patients, their relatives, and the public at large. These activities which cover mental illness and subnormality and various forms of physical handicap culminated in major campaigns and exhibitions during 1967, 1968, and 1969 which dealt with the needs of patients and the facilities available to assist them and their families. Throughout the current year there was a continuance of interest and these topics received further attention.

The subject for the Sheffield Show arranged by the Department was 'Welfare of Handicapped Persons' which concentrated on the various facilities available and the aids which could be used to improve independence on the part of the physically handicapped. The exhibition was well attended and aroused considerable interest.

Cancer Education.—Every year, thousands of people are successfully treated for various forms of cancer but despite this the public are little aware of the progress made in the treatment of this group of diseases. There is considerable reluctance to discuss the subject of cancer and many sections of the public remain unaware of the changing situation and the importance of early diagnosis and treatment.

In earlier Reports reference was made to the discussion of a special sub-committee of the Regional Hospital Board set up to consider cancer education and the meeting of representatives of local authorities in the region which culminated in a resolution that consideration should be given to a Regional Cancer Co-ordinating Committee. Regrettably, little further progress has been made in this project which, though requiring some financial expenditure together with effort and time, would well justify itself if the age old ignorance and fear about cancer could be eliminated together with the development of a greater readiness on the part of the public to seek medical assistance immediately signs of disorder are noticed. All too often patients suffer unnecessary distress because of their reluctance to discuss with their doctor signs of an illness which they believe to be malignant. Frequently their fears have no foundation and the warning signs are of some other non-malignant condition. In cases where the investigations confirm cancer the earlier the treatment is commenced the more hopeful the outcome. Such is the importance of a more enlightened view.

The opening, during the year, of the Weston Park Hospital incorporating the Graves Institute of Radiotherapy provided a valuable opportunity to develop an educational programme both for patients and their relatives. Meetings were arranged for the staff of the hospital on the techniques of cancer education to enable them to contribute further to the programme.

Special Hazards to Health.—The programme of education on special hazards to health continued, Courses of meetings were arranged for young people, parents and teachers, on sexually transmitted diseases, sex behaviour, smoking, alcohol and drug dependence, all within the context of the general health education programme. Emphasis throughout has been on the personal responsibility of individuals, not only for themselves, but for future generations. Given the opportunity, young people respond in a mature way to the responsibilities placed before them, and the technique of informed exchanges with groups and individuals has proved more productive than uninformed or sensational exhortation or didactic prohibition.

Measles.—This common and now easily preventable disease of childhood, which in the alternative epidemic years can affect half a million children, is too frequently regarded by the lay public and some sections of the medical profession as something which is trivial, to be accepted, and endured—this, despite the fact that the disease can cause many serious side effects. In an epidemic year in Britain, as many as 35,000 children suffer complications affecting the lungs, ears, and in some cases the brain. Many thousands of these children require hospitalisation and many are left with some permanent damage. Most individuals see few cases with the more serious complications but the epidemiologist looking at disease in the whole population is aware of the total problem and its cost in terms of medical effort and the misery for the patient and his family. For a three week period in the latter part of the year arrangements were made for a measles vaccination campaign referred to in greater detail on p. 24. Despite great effort the response to the campaign was disappointing and less than 1,000 children were vaccinated during the period. Unless parents realise that they can help to eradicate measles by bringing their children forward for vaccination the epidemics will continue, and the burden of responsibility borne by any parent whose child suffers permanent damage will be great indeed.

Foot Health.—The foundations for future foot health are laid early in life. Attention in infancy and childhood to basic foot hygiene and particularly to the need for properly fitting shoes and socks is important in the prevention of future foot disorders. Later in life foot disability causes untold misery to the elderly, many of whom are virtually immobile because of foot conditions, With a view to developing still further the foot health education potential of the staff of the department, a series of in-service

training meetings were arranged for health visitors and school nursing sisters. Expert advice was provided on foot health problems and foot health education techniques.

Pets and Health.—Many seemingly innocuous and friendly pets, particularly the range of exotic creatures imported from abroad, can be sources of danger to health. One of the commonest pet hazards is the family dog, and during the year a special campaign was conducted warning pet owners of the dangers to health caused by their 'dumb friends'. Attention was focused on the special need for care of dogs which are often stated as being 'man's best friend'. They can, in fact, transmit to humans a wide range of infections and diseases including food poisoning, ringworm, lung infections, liver and kidney disease, scabies and other skin complaints, and a form of leptospirosis. There is also danger of infections which, although rare, can cause anaemia and blindness. Dog owners were warned to observe the strictest rules of hygiene for themselves, their family and the public at large. They were asked to wash their hands after handling pets and especially before meals. The dangers of dogs licking the human hand and face were stressed, as well as special hazards to the health of children, caused by improper care of pets and failure to adhere to the strictest rules of hygiene.

The fouling of roads, footpaths and parks by dogs was given particular attention. This insanitary habit is unpleasant and can lead to transmission of animal diseases to humans as well as the soiling of clothing and property. There is also a slight danger of slipping and falling accidents arising from fouled pavements. There are more than 25,000 licensed dogs in the City and an unknown number of unlicensed animals. Owners were asked to keep their dogs in control, in particular with regard to the fouling of roads, footpaths and parks. It was suggested that if they were incapable or unwilling to train and provide adequate care for their dogs to ensure they cause the minimum of risk to health, they should not keep them.

Considerable support for the campaign was given by the local newspapers and radio who published or broadcast numerous news and feature items on the subject. The campaign also received support from the Secretary of the Sheffield Kennel Association.

Unless the public becomes its own 'watchdog' creating a wave of public censure against those who fail to keep the simple rules of pet hygiene, the problem of infection and environmental contamination will continue to the hazard of all sections of the community. This is the only area of 'down to earth Public Health' in which we have not progressed since Chadwick's time.

Training of Students and Professional Workers.—The staff of the Department contributed to professional training programmes at courses held at the Health Education Centre, and in colleges and training establishments elsewhere in the City. Lectures, practical work or visits of observation were arranged for students undertaking theoretical or practical training. Overseas visitors were made welcome from as far afield as Australia, Denmark, Hong Kong, Guyana, Nigeria and Thailand, some of whom were attached to the Department for short periods of training.

Press and Public Relations.—The mass media as already indicated have continued to contribute to the general health education programme by providing publicity on the work of the Department as a whole, and by arranging to publish or broadcast news and feature items in connection with special campaigns. Radio Sheffield provided facilities for a number of feature broadcasts by members of different sections of the department in addition to the regular weekly broadcasting spot made available to the Health Education Officer during peak listening time.

The Future.—As in previous years attention is again drawn to the enormous growth in demands made on the Health Education Service and the increasing workload carried by all of the staff at the Centre. The position at present is that, whenever new topics requiring special effort are included in the programme, other subjects of possibly equal importance tend to be neglected. There are many health problems which could be alleviated or solved by changes in individual behaviour. Health education is one of the most important methods for achieving these changes and, until it is accepted as an investment in both present and future health and well-being, the increasing tide of modern killers will develop unchecked.

LECTURES AND FILM SHOWS

	Comparative Figures			
	1967	1968	1969	1970
Lectures by Health Education Organiser	246	245	213	179
Lectures by other professional staff	484	455	1,166	1,059
Parentcraft lectures	270	305	361	594
Film screenings followed by discussion	876	1,177	1,204	1,467
Total audience at film screenings	23,161	34,173	36,954	48.829

The above figures do not include informal group meetings, in-service training lectures, or lectures and talks given to regional and national meetings of professional bodies.

SOCIAL PSYCHIATRY

By W. F. DUNNE, Cert. in Social Science, P.S.W.
Principal Social Worker

"Worry is a thin stream of fear trickling through the mind. If encouraged, it cuts a channel into which all other thoughts are drained.

Arthur Roche

In 1970 the Local Authority Social Services Act became law. For the personnel of the Social Psychiatry Service it was the beginning of what will certainly be a long transition from the provision of a specialised social work service to the development of general social work service in the new Social Services Department. Acceptance of a change does not preclude a certain wariness as one moves toward it, nor does it automatically loosen one's hold on past loyalties, values and practices. Valuable relationships which have been made with consultant psychiatrists, general practitioners and hospital nursing and liaison staff must be carefully preserved and extended if the new service is to be effective.

This report for 1970 must note the retirement of Dr. J. Stephen Horsley. He had been with the Health Department since 1960 as senior medical officer in charge of the Social Psychiatry Service. He continues to have a weekly session for family psychiatry at the Manor Clinic and is similarly engaged in Bradford. His interest in the problems of prevention of mental illness and those of rehabilitation were shown in his extensive writing on these subjects and he hopes, in his now greater leisure, to complete his book on social psychiatry.

The section lost another member of the staff when Mr. W. E. Lloyd moved to the Regional Hospital Board. Mr. Lloyd had been in charge of the administration of the Social Psychiatry Service since 1961. Since the implementation of the Local Authority Social Services Act and the transfer of the Junior Training Centres to the Education Department were impending, neither Dr. Horsley nor Mr. Lloyd was replaced and responsibility for the overall direction of the section devolved on the principal social worker.

ADMINISTRATION

Norfolk Park Junior Training Centre.—At the year end the number of juniors on the centre register was 101 and on that of the special care unit was 40.

One trainee teacher was seconded to the training course for teachers of the mentally handicapped, one returned having successfully completed the course and was regraded as a teacher.

Norfolk Park Short-Stay Residential Unit.—There were 106 admissions to this unit—5 more than in 1969 and the average length of stay remained at 20 days.

The table below sets out the reasons for admission from which it can be seen that this was most frequently arranged in order to relieve the family or enable them to enjoy a holiday free from the limiting responsibility of the sub-normal child.

Short Stay Home

Number of Admissions	
Boys	69
Girls	37
TOTAL	106
Physical state	
Ambulant	79
Non-ambulant	27
Hyperactive	22
Requiring to be fed	33
Epileptic	52
Incontinent	69

Reasons for admission

Parent in hospital	10
Rest for parents	26
Parents on holiday	34
Mother expecting baby	3
Other reasons	33
Average length of stay (in days)	20

The longest stay (6 months) resulted from a serious long term illness in the child's mother.

Talbot Junior Training Centre.—There were 122 children on the register at the close of 1970.

Three staff members were seconded for training on the Sheffield Polytechnic Course for Teachers of Mentally Handicapped Children and one returned from training.

A sports day was held at the City Police sports ground with considerable help from the police who laid out the ground and provided diversion with an exhibition of dog handling and horse riding. The children and their families enjoyed the day, the parents expressing gratitude to the police for their able co-operation.

Brunswick Street Training Centre.—Here 43 trainees were on the register at the end of 1970. This centre has offered places chiefly to the more seriously mentally handicapped adults. The output achieved by these trainees reflects great credit upon the staff, the building occupied being ill-suited for use as a centre. Trainee morale is high and for the second time output figures have risen greatly. This is exemplified in the production of disposal bags which has gone up from 62,000 in 1969 to 98,000 in 1970. Other types of paper bags and a calendar were also produced in greatly increased quantities.

Along with the productive activities time is allocated for educational and social training covering such items as dressing and word and number recognition. All the adult centres have taken great care to ensure the trainess were familiar with the new decimal currency.

In 1970 the Chief Education Officer permitted the trainees to use the playgrounds of Springfield School a half day each week enabling an extension of the sports programme. Six trainees joined with others from the Towers for swimming instruction and in 1970 three learned to swim and have obtained certificates.

The staff accompanied some trainees on a fishing week-end and to the annual camp at Pengwern Hall, North Wales. They have also taken the trainees to a football match on a Saturday afternoon and, one evening, to see the film 'Oliver'. Money has been raised for a cine-camera and a projector.

One staff member returned after successfully completing the Diploma Course for Teachers of the Mentally Handicapped and another has been seconded.

The Towers Training Centre.—127 adults were on the register at the close of 1970.

Although not a purpose built centre much has been achieved at the Towers. As with Brunswick Street morale among the trainees is high and the output of contract work and general handicrafts has risen once again. This rising output provides an acceptable aid towards running costs but is better seen as an index of the co-operation of staff and trainees. The care and planning which have made it possible for so many seriously handicapped trainees to become productive reflects great credit upon the staffs of the centres, for success of this kind gives significance to what has been ignored and the sub-normal person is seen to be capable of playing a part in a society which places great emphasis upon the individual making a contribution.

As at other centres social training proceeds in parallel with production. New ground has been broken by one staff member who has stimulated some of the trainees

to an interest in painting. Some of this work shows a surprising vigour and it has created quite a ripple of interest. It is hoped that this form of expression can be fostered in those trainees who find it congenial.

The trainees and staff joined with those of Pitsmoor in a holiday and spent a week at the Miners' Welfare Holiday Camp at Skegness. A number of walking and fishing trips were organised by staff members at weekends.

Pitsmoor Road Training Centre.—At the end of 1970, 115 trainees were on the register including those at the adjacent Ivy Lodge annexe.

In 1971 Pitsmoor Road Training Centre will close and the trainees will be moved to other centres including that now under construction at Woodfold. The centre opened in January 1938 and by the end of the month there were 13 'boys' and 5 'girls', all over 16 years. This number had risen to 30 'boys' and 10 'girls' by the middle of the year. It was a mixed centre but the girls appear to have been trained largely separately from the boys. Girls were instructed in cooking, laundry work and cleaning: the boys in woodwork, mat making, basket work, house repairs, boot repairing, upholstery and gardening. The training objective of getting the trainees placed in employment was firmly emphasised and by January 1939 eight trainees had been placed in employment which, considering the difficulties in finding employment at that time, was a considerable achievement. The suitability of the Pitsmoor Centre premises was questioned, even when the building was first being considered for use as an 'occupation' centre. The determining factors in its choice seem to have been that the Corporation owned the building and it was not being used and could be adapted at a reasonable cost. In fact, repair, cleaning, decoration, furniture and tools cost £450, although substantial sums were spent in 1955 when the centre was extended.

Until the Towers opened in 1954 Pitsmoor continued as a mixed centre but thereafter was single sex. However, with the opening of Woodfold it is quite possible that centres will in future be mixed for it is obvious that the work now being done can be carried out by either sex.

In 1970 Pitsmoor trainees joined with the Towers for a holiday at the Miners' Holiday Camp at Skegness.

Mental Welfare Officers.—There were no resignations during the year and the staff increased by two officers. Two mental welfare officers and a trainee successfully completed the C.S.W. Course at the Sheffield Polytechnic. Another mental welfare officer returned after successfully completing the one year C.S.W. Course at Cardiff University. One trainee was seconded to the C.S.W. Course at the Sheffield Polytechnic. One mental welfare officer was seconded to the one year C.S.W. Course at Cardiff University and one mental welfare officer was seconded to the Psychiatric Social Work Course at Liverpool University. Though the title mental welfare officer remains unaltered in the parts of the Mental Health Act, 1959 which are becoming the responsibility of the Social Services Committee, it is anticipated that the duties will eventually be undertaken by social workers with a broader responsibility.

Southey Hill House.—This hostel was opened in the Summer of 1961 with 12 beds available for men who were recovering from mental illness and were considered to need the services of a half-way house between hospital and community. At first admissions were slow but eventually they built up and generally there is a short list of patients awaiting admission. During 1970 an extension was under construction which will provide six additional beds and more suitable accommodation for the resident superintendent and his wife.

During 1970 there were 13 new admissions and 7 re-admissions; the average length of stay was 22 weeks.

Close contact is maintained with Middlewood Hospital, particularly with the Industrial Liaison Officer who works very closely with the Superintendent of the hostel and the senior mental welfare officer, who in turn keep the residents in touch with the social work services.

Southey Hall.—During 1970 there were 7 admissions, two of which were short stay residents admitted whilst relatives were temporarily unable to provide care. Four residents left the hostel and there were 2 re-admissions; the average length of stay 42 weeks.

At the end of 1970 there were 22 residents. This hostel, as noted in previous reports, has not been full since it opened in 1968. One reason for this has been a difficult-to-cure structural defect, which allowed water to enter certain rooms whenever there was a combination of rain and high wind. By the end of 1970 this defect had been largely, but not entirely, overcome and more rooms became available for use.

During 1970 the Deputy Superintendent and Matron left to take other posts and replacements have been recruited. As with Southey Hill Hostel close contact is maintained with the Industrial Liaison Officer at Middlewood and also with other agencies so that residents can be maintained in employment.

Oakbrook View.—In 1970 there was 1 new admission to the male accommodation and 3 new admissions to the female. Short term care was given to 15 men and 14 women, the average stay being two weeks. At the close of 1970 there were 15 men and 15 women in the respective accommodation. Turnover in these hostels is small and such movement as occurs is usually on the women's side. Only one man in the male hostel is capable of employment but the others attend the adult male training centre. The present emphasis on the community care of the subnormal and severely subnormal makes pressing the need for additional hostels or other forms of long term accommodation.

SOCIAL WORK

Referrals.—The total of referrals for assessment, care or after-care was 1,399 as against 1,138 in 1969 but actual visits numbered 558 which is lower than that for 1969 (571) or 1968 (637), and probably reflects a more discriminating use of local authority social work and other resources by the psychiatrists. Many old persons, for instance, who previously might well have been referred to social psychiatry were referred directly to the Social Care Department.

The year was not marked by innovation or advance: it was more a period of rationalisation. The day centre which had been successfully run by volunteers at Psalter Lane was transferred to the new centre for the physically handicapped which opened on the Kelvin development. The volunteers moved too, but gradually found themselves superfluous as their charges were absorbed into the life at the centre. The intentions behind the move were to obtain more places and to integrate the people attending Psalter Lane with the larger group at Kelvin in anticipation of what seemed likely to be future practice. There have been conflicting reports about the success of the move. Though some integration has taken place, some of the original members felt keenly the loss of their separate group identity. All the volunteers expressed dislike of the change and asked that another group be formed but, in the uncertainties of the impending change to the Social Services Department, action was deferred until the new pattern of responsibility was clear.

The problems of re-settlement continued unabated but some welcome relief came from the opening of Bethlehem House in Hanover Street. These premises, a large 19th century house, had previously been used by the Contact Group Trust as a centre in which young drug users could meet or be accommodated whilst cure was attempted. The Trust opened a day centre in Backfields, which is known as The Potter's House and sold the Hanover Street premises to the Bethlehem Trust which looks after homeless men mainly from Sheffield. The intention is not to compete with the reception centre at Woodhouse since this caters for 'wayfarers' or what used to be called 'tramps' and does not admit men who have had a recent domicile in Sheffield. The Social Psychiatry Service has been fortunate in having a few men for whom accommodation was extremely difficult to obtain taken into the shelter.

In the field of subnormality and severe subnormality there is as yet no clear declaration of national policy. Debate as to the role of the hospital medical and nursing staff continues with pressure on local authorities to provide more hostel accommodation. In an area where flexibility is in the best interest of the patients, the movement of patients between hospital, hostel and community (except for short term care) is minimal. The desperate shortage of beds plus a lack of information regarding the functioning of the families of the subnormal determine this rigidity. We need to know when and how effectively social workers can intervene to break the patterns of over-protection which produce helpless adult subnormals. We need also to know the nature and form of community support which will enable the burdened parents—particularly the mother—to retain the subnormal in the family, and following directly from this we need access to much more short term care facilities. Some form of day care for severely subnormal persons over 16 is required and, where nursing care is necessary, it would appear appropriate that this should be provided by the hospital service.

Group Work.—The experiment in social group work with mothers of mentally handicapped children has now become an established part of the service provided by the Social Psychiatry Service within the administrative area of one of the Senior Mental Welfare Officers. Two groups have been meeting monthly, one since September 1968 and the second group since February 1970. The attendance at the second group has been disappointing in that only six mothers attend regularly. Nevertheless, the Group has appeared to be of value to those mothers who have attended, and the provision of two groups has made it possible to offer this facility to the mother of any mentally handicapped child living within the senior mental welfare officer's area. A further disappointment has been that pressures of work have made it impossible to complement this group work with a greater degree of individual counselling for the mothers and families.

Eighteen mothers have taken advantage of this facility during the year. Parents are very conscious of the transfer of the junior training centres to the Education Authority and of the effects of the new Social Service Department. Their sensitivity to change seems related to some delicacy of adjustment to the fact of having a mentally handicapped child. The Senior Mental Welfare Officer was concerned that the relating of difficulties might excessively heighten the apprehension of mothers of young children, and that the self-criticism of certain mothers might be aggravated by the optimism of others. These fears proved groundless but difficulties have emerged. The social worker may, for instance, inhibit natural group progress by allowing himself to be drawn into imposing his own views, although an established group can deal with this by politely and successfully ignoring his ideas. The other problem is that of the group concerting an unrealistic attack on an outside person or agency. An attempt to counteract this involved inviting a representative of the agency to join the group (e.g. the Principal of a training centre, the welfare doctor in regard to early assessment). Guests and observers are only invited when they personify a service which has been prominent in discussion.

OCCUPATIONAL HEALTH SERVICE

R. E. Browne, M.R.C.S., L.R.C.P., D.P.H.,
Senior Medical Officer (Occupational Health)

"So I will play the part of a whetstone which can make iron sharp though it has no power itself of cutting"

Horace (Ars Poetica)

Medical Examinations—A total of 2,604 medical examinations were carried out; of these 1,306 were pre-employment examinations and the remaining 1,298 were re-examinations. In addition 22 persons resident in the Sheffield area were examined on behalf of other Authorities for fitness for official staff appointments. The pre-employment examinations of 1,078 workpeople consisted mostly of the statutory examination of Public Service Transport Drivers and Conductors, and Heavy Goods Vehicle Drivers. Pre-employment examinations of official staff were carried out in 228 of a total of 656 forms received.

Employment of Disabled Persons.—The Department of Employment and Productivity raised the question of the quota of the numbers of Registered Disabled Persons employed by the Authority being less than the required proportion. There is still a widespread prejudice among most people against registration, and numbers of persons whose work was modified because of ill-health are not registered as disabled. Others who have permanent disabilities have selected the type of work in which the particular disability is no handicap, and no occasion is likely to arise where the disability would result in any difficulty. When modification of work was recommended after illness resulting in some permanent disability, advice was given regarding the advantages of registration; it is estimated that about eight persons made application to be registered during the latter part of the year. It was recommended that advertisements in the press of vacancies for such posts as telephonists and audio-typists should include the additional information that registered disabled persons would be considered. The numbers of designated occupations available for disabled persons has been reduced appreciably by the conversion to automatic lifts, and the installation of parking meters and closing down of temporary car parks for re-building programmes. While these posts are not considered as part of the quota, the non-availability undoubtedly has some effect on the numbers of disabled persons on the registers of the unemployed at the Department of Employment and Productivity.

Heavy Goods Vehicle Drivers.—The medical examination of applicants for Heavy Goods Vehicle Driving Licences after 2nd February 1970 became a statutory requirement. The medical certificate issued by the Licensing Authority is similar to that currently required for licences to drive Public Service Vehicles; it is open to a wide range of interpretation, and to try and ensure some measure of uniformity of standards all applicants employed by the local authority are examined by the Occupational Health Medical Officer.

From the outset it was anticipated that there were likely to be a number of drivers, particularly among the older age groups, who would not meet the standards required, and of a total number of 178 applicants examined 11 were found to be unfit; three for cardio-vascular conditions, three for respiratory conditions, one for hearing defect and four for defects of vision. Almost all these examinations were for drivers who had been employed for some time, and whose licences were due for renewal, and it was fully appreciated that the necessary modification of work following a finding of unfitness for driving a heavy goods vehicle would result in some dissatisfaction with the decision. In these cases meetings were arranged between the union representative, an officer of the department concerned and the Occupational Health Medical Officer to explain the potential risks involved with a driver whose medical fitness does not meet with the recommended standards, and the legal liabilities of the employing department.

Occupational Hazards.—Several cases of dermatitis following the use of biological washing powders in the Home Help Service were reported. Advice was given that so far as is possible these powders should be avoided, but in those cases where no other powder or detergent was provided by the household, the use of protective rubber gloves, followed by thorough cleansing of the skin after completion of work appeared to be adequate in controlling the condition. Contact dermatitis is still the most widespread of occupational diseases and is found in workers with solvents, detergents and cleansing substances other than the biological washing powders.

The Recreation Department posed a theoretical problem. A chemical fungicide is used on public fields and bowling greens. It was noted that many players of cricket and bowls have a habit of licking their fingers when gripping the ball or wood and it was questioned whether or not this was likely to be harmful. Numerous enquiries elicited finally the advice from the Ministry of Agriculture, Food and Fisheries that the recommended concentrations were very small, and that weathering would rapidly diminish the toxicity of the residues. While there was no record of actual research into the amount of chemical taken up by the ball and transferred to the fingers, there were no cases on record of illness resulting from the use of this fungicide on public grassland and greens, golf courses and cricket pitches. A far greater hazard appears to be the contamination of these areas by the excreta of birds and animals, all of which, including dogs, are known to be common carriers of disease transmissable to humans.

Immunisations.—Immunisations against tetanus were given to 249 persons from the Recreation Department, the City Engineer's and Cleansing Departments. Smallpox vaccination and Heaf Testing against tuberculosis are offered to all new ambulance drivers. A total of 30 persons were vaccinated against smallpox.

While it was not considered necessary to offer routine immunisation against influenza, departments were requested to submit names of key personnel who wished to be immunised; the response was such that special sessions were arranged to vaccinate a total of 864 persons. Of these over 300 were public health staff including health visitors, district midwives, home nurses and home helps. Of the remainder a large proportion were made up of bus drivers and conductors, and staff of the old people's Homes. The exceptionally mild winter of 1970/71 probably had a favourable influence on the incidence of respiratory infections more than any other factor.

Social Work.—The resignation of the social worker for family reasons and the subsequent difficulty and delay in appointing a successor resulted in a running down of the case load, as it was not possible to arrange for a handover of current cases. Our new social worker, appointed in June, had the problem of building up again her contacts with the personnel and welfare officers of the departments.

Most of the cases were related to social security and supplementary benefit problems following long term illness and retirement on health grounds; the referral of disabled persons for the provision of suitable appliances, and visiting the sick in general. One case of alcoholic addiction, who was in the habit of drinking heavily during his lunch break, and whose work in a supervisory capacity had so deteriorated as to earn him several reprimands with the possibility of dismissal, appeared to have made a good recovery by the end of the year. A series of supportive interviews had been arranged with himself and his wife, and the works trailer was removed from its parking place in the yard of a public house, to a site an inconvenient distance away from temptation.

WELFARE OF HANDICAPPED PERSONS SERVICE

(Welfare of the Blind and Partially-Sighted)

By R. A. LYNN, A.M.B.I.M.
Workshops Manager
and A. J. BAKER, Chief Assistant (Admin.)

"We see things not as they are, but as we are"

Henry Tomlinson

EMPLOYMENT AND TRAINING

During the year, every effort has been made to keep workers employed on traditional trades as busy as possible and the Mat, Boot and Women's sections are holding their own. The Workshops have been particularly fortunate in gaining increased orders for basketware and at the beginning of December, some of the men in the Basket Department began to work overtime in order to keep pace with demand. It has been a very successful season with fishing baskets. The position in the Brush Department has not been so happy but the development of new work has enabled the manager to transfer workers and cope with the situation.

The main new trade so far introduced is the making of toys. By a combination of careful designing, together with the provision of suitable jigs and fixtures, it has been shown that the blind can satisfactorily make these items. Up to now we have worked in wood but it is the intention to use other materials and broaden our range of products. Initial sales have been satisfactory and at prices comparable to those for similar goods sold by independent retailers. It is difficult to predict the outcome of this project, but judged by the progress up to the present, there appears to be a definite future.

Some of the men and women have had opportunities to try their hands at other new tasks and we are currently undertaking some assembly work for a cutlery firm. The workers involved are not engaged upon this work on a full-time basis and so have been under their traditional department headings shown in the employment list.

A number of other projects are being discussed and examined, and it is hoped that the near future will see the workshops breaking further new ground. Perhaps one of the greatest things revealed during the year has been the willingness of the blind to tackle new tasks. There has been a perseverance and a determination to succeed coupled with a keen desire to move forward into new activities.

The Sheffield scheme of payments to workshops employees at 31st December, 1970, was as follows:—

(i) The basic rate for qualified male workshop employees was £15/10/0 (those qualified for the service supplement receive £15/17/0) and the rate for qualified females was £11/14/6 per week (with the service supplement £11/19/9).

(ii) The standard working week is five days—40 hours for males and 35 hours for females.

(iii) The qualifying earnings figures are:—

	£	s.	d.
Males			
Brush pan hands	4	6	5
Brush drawn hands	3	9	5
Basket department	5	0	0
Mat department	5	19	3
Boot department	3	6	0
Females			
Caning and seagrass seating workers	2	10	1
Round machine (also netting)	1	8	4
Light basket work	1	0	0

(iv) Workers' earnings are reviewed at six-monthly intervals but all operatives were able to produce articles in sufficient numbers to bring their earnings up to the qualifying rates.

The number of blind persons employed in the workshops at the 31st December, 1970 is shown in the table below, although there is also a female trainee from Sheffield who is learning chair caning.

Area	*Men's Department*					*Women's Depart-ment*	*Total*
	Basket	*Boot*	*Brush*	*Mat*	*New Trades*		
Sheffield	6	5	10	9	5	5	40
Doncaster	1	—	—	—	—	—	1
Rotherham	1	—	3	—	—	1	5
West Riding of Yorkshire	1	—	1	3	—	—	5
Derbyshire	—	—	—	—	1	1	2
TOTALS	9	5	14	12	6	7	53

GENERAL SOCIAL WELFARE

The year 1970 saw further changes in what had been recognised as the established service for blind persons in Sheffield. Staff retirements to some extent influenced the decisions taken, but two regular activities ceased to function in March, 1970. These were the men and women's handicraft classes and the deaf blind, class. The handicraft classes were started in 1928 before the Sharrow Lane premises were built and the deaf blind class was formed in 1936. As in many other ways, Sheffield had been pioneers in these fields and provided these services years before many other authorities. Those persons who wished were invited to attend the Kelvin Welfare Centre which had opened earlier in 1970, as also were the members of the Hillsborough District Social Centre which had closed at the end of 1969. This reduced the number of district social centres to three—those held at Broomhill Welfare Centre, Sharrow Lane and Darnall Labour Hall.

At December 31st, 1970, 657 blind persons and 44 partially-blind persons held free travel passes and 15 permits were on issue to blind persons to enable them to carry their guide dogs free on Corporation buses.

Holiday grants were again given to blind and partially-sighted persons who satisfied the conditions laid down, and in the case of blind persons they received an additional grant from the Royal Sheffield Institution for the Blind.

The chiropody treatment scheme which has been available to blind persons since 1943 has continued, chiropodists in private practice being still used for this service. At 31st December, 1970, 224 blind persons were receiving treatment against 226 a year previously. In all 20 chiropodists were used and 2,112 treatments given. Partially-sighted persons needing treatment are dealt with under the Department's general service for the elderly and handicapped.

The Department has employed a full-time wireless mechanic since 1947, to service the sets received from the British Wireless for the Blind Fund. 563 of these sets were in use at the end of the year, while maintenance was also carried out on 32 privately-owned sets of other blind people. In the majority of cases no charge is made, but each case is assessed individually according to an approved scale; those in full-time employment pay full cost.During the year 101 sets were returned to the Department owing to deaths or receiver defects. 50 new sets were received from the B.W.B. Fund during the same period.

A summary of the work undertaken is given below:—

	1969	1970
Service visits paid	490	540
Repairs carried out at the workshops	140	121
Sets issued to blind persons for first time	85	72
Sets issued for replacement purposes	46	53

This service also covers certain persons on the partially-sighted register, and 41 gift sets which have been allocated are being maintained by the mechanic; 6 were issued during the period under review.

During 1969, the authority in conjunction with the Royal Sheffield Institute for the Blind, appointed a mobility officer for the blind and it was agreed that this officer's salary be shared between the two bodies. This year, a further mobility officer has been appointed under the same arrangement and he is at present seconded for mobility training.

The new retail sales outlet, the kiosk named 'Blindcraft' which was opened in Castle Square, has now become firmly established. Space has been a limitation on its activities but the success of the venture can in no small measure be attributed to the loyal and devoted service given by the four part-time ladies who have continuously staffed the kiosk since it was opened. In view of the fact that many larger goods could not be displayed, sales of just over £6,000 in the first twelve months of operation compares not unfavourably with just over £8,000 in the last twelve months of the Pinstone Street shop.

SHEFFIELD JOINT BLIND WELFARE COMMITTEE

The purpose of this Committee formed in 1948, is to co-ordinate the welfare services of the Royal Sheffield Institution for the Blind and this Department. The regular features which had proved popular in the past were continued and there was the usual joint outing. The destinations in June, 1970 were Bridlington and Derbyshire (Buxton and Matlock).

WELFARE OF HANDICAPPED PERSONS SERVICE

General Classes

By A. J. DEAN, C.S.W., Deaf Welfare Diploma
Principal Social Worker

' In prosperity our friends know us; in adversity we know our friends"

J. Churton Collins

The Authority has provided a welfare service for physically handicapped persons since 1952 and over the years the services have developed in many ways. The number of registered handicapped persons has increased quite considerably over the past five years from 1,827 in 1966 to 4,623 at the end of December 1970. Society has become increasingly aware of the needs of handicapped persons over recent years, and publicity which preceded the Chronically Sick and Disabled Persons Bill, and the Act which followed, might have been expected to produce some increase in register strength half way through the year. This in fact has been the case as the undermentioned figures show.

Handicapped Persons Register

1966	1967	1968	1969	1970
1,827	2,314	2,918	3,402	4,623

The full impact, however, has probably not been felt as yet and it is anticipated that the demands for services will multiply in the next decade or so. Quite a number of clients are registered because they need some simple aid such as a bath seat or handrail, while others are registered following application for a bus travel pass. It may well be necessary in future for the criteria of registration to be redefined so that minor aid, major needs and social work needs can be seen more realistically. Other reasons for referral may arise from the need for welfare assistance or a case work service. Whatever the source of referral, however, all clients are sent a letter informing them of the various services available and are invited to apply for any which they think would help them in their difficulties.

CENTRES

A large number express the wish to attend one of the handicapped persons centres and the average weekly attendance at these centres was 1,050. Approximately 520 clients per week require special transport to the centres which is provided by the welfare services fleet. Unfortunately, there is always a waiting list for persons requiring transport and a number of people have to wait some considerable time. It is also unfortunate that clients who have received a variety of services, often including occupational therapy, in hospital have to wait for six or seven months after discharge before they are afforded similar assistance at a centre. However, a domiciliary occupational therapist has been appointed during the year and she is now able to help people who are waiting to attend a centre. This service has been well used and appreciated, and there is already a large number of clients awaiting occupational therapy in their homes. There is a growing need to improve and increase the services to the completely housebound as well as the ambulant handicapped, and it is hoped that it will be possible to appoint additional staff, thereby enabling the qualified occupational therapist to increasingly use her professional skills in assisting handicapped persons in their own homes and kitchens and in other aids to living.

The centres at Manor, Firth Park and Psalter Lane are almost invariably full. The Kelvin Centre welcomed its first client on the 5th January, 1970, and in April was officially opened by Dr. J. Dunwoody, M.P., Parliamentary Under Secretary of State, Department of Health and Social Security. This marked a very important step in the development of the services for handicapped persons in the City since Kelvin is the first purpose-built centre. It is a two storey building situated near an extensive housing scheme and was designed as a multi-purpose project with accommodation for maternity and child welfare and home help services on the first floor.

On the ground floor is a self-contained handicapped persons centre which provides facilities for up to 100 physically handicapped adults. There is a large work room for light occupation, the corner of which has been fitted out as a domestic kitchen for rehabilitation purposes. The building contains a lounge, a television room and a large social room. There is an adequate dining room which accommodates 50 people. The kitchen is equipped to provide meals for all the handicapped persons attending the centre but arrangements could be made for the kitchen facilities to be extended to provide catering for elderly people living in the adjacent flats. There is a ladies' hairdressing cubicle and also a bathroom which has a free standing bath to allow easy access to assist those who are severely disabled. This centre has, of course, considerably increased the opportunities for handicapped persons to attend a social centre and, whilst not yet up to full capacity, the numbers attending have gradually increased to approximately 50 persons per day. It is open five days a week and over the year the authority sanctioned use of the facilities of the centre in the evening to the following voluntary societies:— the Sheffield and District Branch of the Association of 62 Clubs, the Disablement Income Group, the British Polio Fellowship, the Sunshine Club (for former Middlewood patients), the Sheffield and District Association for Mental Health, and the British Epilepsy Association.

After extensive structural alterations the Johnson Memorial Elderly Handicapped Day Centre was opened on 25th November, 1970. This was formerly the headquarters of the Home Nursing Service; it provided some residential accommodation for staff and contained the training centre for the home help and home warden services. The adaptations carried out enable the centre to accommodate 50 elderly handicapped, and it now includes a small work room, a quiet lounge and a small games room. There is a separate dining room capable of seating 20 persons and an adequate kitchen for preparation of main meals.

ADAPTATIONS AND AIDS

The rise in numbers indicates all round increasing demands on the services. Many cases are referred to the department for some material aid and quite often the first contact is made when a technical officer visits on request from other agencies such as general practitioners, health visitors etc., for assessment of the client's needs. The number of adaptations which have been carried out during 1970 are shown in the following table:

The following alterations and adaptions were carried out at a cost of £8,724.

(*a*)	Provision of handrails to steps and stairs	347
(*b*)	Provision of gateway at top of stairs	8
(*c*)	Provision of concrete path	10
(*d*)	Provision of concrete ramps and platforms	13
(*e*)	Provision of lifting hooks in ceiling	5
(*f*)	Provision of coal bunker	2
(*g*)	Provision of handrails in w.c.	11
(*h*)	Provision of handrails in bathroom	21
(*i*)	Provision of handrails to hall walls	13
(*j*)	Provision of locks with lever handles	3
(*k*)	Provision of w.c.	4
(*l*)	Rehanging doors	10
(*m*)	Refitting garage door handles	4
(*n*)	Resetting steps	4
(*o*)	Removal of bath handgrip	1
(*p*)	Replacement of handrails by mopstick handrails	3
(*q*)	Provision of door and frame	3
(*r*)	Provision of room	1
(*s*)	Fitting special glass	1
(*t*)	Enlargement of kitchen	1
(*u*)	Replacement of w.c. basin	1
(*v*)	Turning of w.c. pan	2
(*w*)	Resiting immersion heater switch	3
(*x*)	Provision of electricity service and socket	2
(*y*)	Provision of concrete base to garage	3
(*z*)	Replacement of garage doors	2

(*aa*)	Provision of clothes post	1
(*bb*)	Replacement of sink	1
(*cc*)	Repositioning of sink	3
(*dd*)	Resiting of taps in sink	1
(*ee*)	Lowering of kerb	1
(*ff*)	Provision of pavement crossover	3
		488

Here again the increase over the years is quite high and in 1966, 154 adaptations were carried out as against 488 in 1970.

During the year the Authority has also been able to complete a further 12 purpose-built bungalows for severely handicapped persons in the City.

Conferences..—Day conferences for supervisory staff have been held over the past 2 years. An innovation this year has been a weekend residential conference held within the City at a Conference Centre for supervisors. This was thought to be highly successful by all those attending, and it is hoped that this will be a continuing feature for staff development.

SOCIAL WORK

Continually greater demands and pressures have been placed on supervisory technical staff together with an increased demand for welfare services from clients. There have been some staff changes in the social work staff due to retirement but vacancies occurring have eventually been filled. The only increase in the field work staff during the year was the appointment of two welfare assistants. These have been used to assist professional social workers, at the same time gaining experience in social work themselves.

Reference was made in the last report to the improved relationships that have developed between centre supervisory staff and social workers effected in part by the formulation of Client Committees. Whilst many of the professionally trained social work staff are essentially trained in one to one relationships, a number who have had some experience have expressed the wish to be more involved in group situations, and this augurs well for developments in the service. The Department has again been heavily involved in student training and has accepted students from a large variety of social work and child care courses. A number of our own staff are currently seconded on professional training courses.

Increased liaison with hospital based case workers and those in the domiciliary services has resulted in a greater demand being made on our service. The case load carried by workers in the department is extremely high and in a number of cases only 'first-aid' services are available.

WELFARE OF THE DEAF AND HARD OF HEARING

There are at present 260 deaf persons with speech, 236 deaf without speech, and 184 hard of hearing on the register, and the services for this group of people have continued as in previous years. Once again, the trustees of the Sheffield Association of the Adult Deaf and Dumb have made available a grant to the local authority which has been used to give supplementary help to deaf persons who were ineligible for help under a rate borne scheme. A considerable amount of the monies given has been used to assist elderly deaf to take holidays and to provide various gifts and other forms of help. The social centre continues to function quite satisfactorily and the elected representatives of the deaf who organise the activities at the centre have once again worked very hard to make this a successful club. The Sheffield Association for the Hard of Hearing continues to meet in the centre at Psalter Lane once per week and is a very popular club. From time to time, the committee of the association refer cases where there appears to be a need for social work help, and the Authority has also assisted some of the association members in obtaining travel passes to enable them to attend the centre.

PUBLIC HEALTH INSPECTION

"Public Conveniences are few: unfrequented streets where relief is permitted are marked 'P' "

John Hector (Advice to Foreigners)

The repair, improvement and clearance of houses under the Housing Acts remains an important responsibility; more time was spent on investigating the applications for qualification certificates to enable owners to increase house rents where justified. There was no falling off in the applications to improve houses, and many requests were again received for priority rehousing on medical grounds. Matters of food hygiene, houses in multiple occupation, offices and shops inspection, noise abatement, drainage, nuisances, pleasure fairs and public swimming baths continued to receive attention.

The strike of refuse collectors and sewage disposal workers brought the need for extra vigilance but happily there was no serious effect on the public.

Details of the work carried out, and the types of complaints dealt with, are shown in summary form on page 132.

Animal Welfare.—There are thirteen premises in the City which are licensed as boarding establishments for cats and dogs. Owners may leave their pets 'in care' when they themselves are sick or on holiday. Three premises are licensed under the Riding Establishments Acts 1964 and 1970. The latter Act has amended the 1964 Act to ensure inter alia, better protection of horses kept for the purpose of letting out on hire or for use in riding instruction, and proprietors of riding establishments must provide adequate insurance cover against the risk of injury.

There are 27 premises licensed under the Pet Animals Act, 1951. All these premises are kept in good order and condition, and very few problems arise. This may be because of the legal conditions imposed on the owners or, more probably, because the people who carry on such businesses are concerned about animal welfare.

Canal Boats.—70 visits were made to the canal basin by inspectors, but only 6 boats were seen throughout the year and one infringement of the Canal Boat Regulations was found. Details of the visits are shown on page 133.

Caravans.—There are four licensed sites in the City. One site housing 30 caravans is used for week-ends and holidays and occasionally caters for campers 'on tour'. Two sites for single caravans and one site with 2 permanent caravans and 12 week-end holiday caravans have limited planning approval.

None of the sites in Sheffield provide facilities for tents despite the fact that this form of camping using present day sophisticated and luxurious equipment is growing in popularity and appears to be here to stay. In fact, on many sites, both in Britain and abroad, the number of tents is greater than caravans, and it would seem wise to provide proper and adequate facilities in this area rather than be faced by indiscriminate camping with its associated public health problems.

Common Lodging Houses.—Only one lodging house now remains in the City and it is in the east end. This used to provide accommodation for 14 men but during the year the maximum number of lodgers received at any one time was six. The premises are in a confirmed compulsory purchase order and it is expected that this property will be demolished within the next twelve to eighteen months.

Disinfestation.—As a result of the small percentage of houses found verminous in the past few years, an experiment was carried out over a period of three months to see if public health inspectors could be relieved of the time-consuming task of inspecting houses prior to the transfer of the tenants to Corporation houses. However, it was found that the observations of unqualified staff were not sufficiently reliable to justify a change of procedure bearing in mind the risk of possible widespread infestation of Council dwellings.

5,976 houses were inspected during the year of which 69 were found to be verminous and treated with a suitable insecticide. Although D.D.T. has been effective, its use is now limited because of the international concern about its toxic effects on humans but the newer insecticides have been used after tests have proved their effectiveness. Chlordane, dieldren and insectalac varnish are particularly effective against cockroaches, lindane against mites and malathion against red mites. Pybuthrin, a non-toxic insecticide, is employed in hospitals, bakeries and kitchens.

Of the 858 requests made for the eradication of insects in houses, just under half were for bugs, less than one fifth were for cockroaches, and the remainder were for a variety of insects, particularly fleas, red mites and wasps. Many requests were received for the removal of wasps' nests but, as in previous years, advice only was given except where the enquirer was found to be physically incapable of taking the necessary action.

82 filthy or verminous premises were treated during the year and 99 requests for the destruction of filthy or verminous articles were dealt with.

Factories.—At the end of the year there were 2,548 factories on the City Council's register which used mechanical power and 92 factories not using mechanical power. A table giving the particulars required by Section 153(1) of the Factories Act 1961, together with an analysis of two defects found and action taken, is shown on page 135.

Offices, Shops and Railway Premises Act, 1963.—While a reasonable standard is being maintained in those premises which are subject to the provisions of the Act, minor contraventions are often found when visits are made.

The number of accidents reported appears to be diminishing. Whether this indicates that improvements are being achieved as a result of the enforcement of the Act is difficult to determine, but it is more likely that many accidents are not being reported.

Following a recent accident involving a youth aged 15 years who, whilst cleaning a hand-operated meat slicer without permission, suffered fairly deep cuts to the thumb and finger of his left hand, a prosecution was taken by the local authority to the magistrates' court. The employers claimed that the young man had not been allowed to use or clean the machine but that he cleaned the machine when out of sight of the manageress. They further claimed that he had been warned of the dangers of the machine and told not to touch it. The court accepted the defence that the employers had shown due diligence by instructing the youth not to use the machine and dismissed the case. It would seem that in most cases of like nature, an employer could advance a similar plea and escape penalties. Some form of documentary proof signed by all young employees would appear necessary to establish firmly that the necessary warnings and instruction had been given, as verbal statements are difficult to prove or disprove.

Another problem arose during the year in respect of engineers' reports on inspections of lifts. The Hoists and Lifts Regulations, 1968, require that a copy of such a report in the form set out in the Regulations must be sent to the local authority where defects are found, and the lift cannot be used with safety. In one case, a lift in a post office was found to be at fault and, when the report requested was received, it was found to be not in the form required by the Regulations. When the attention of the postal authorities was drawn to this matter they stated that they had always used their own form and that this was so throughout the country. On the advice of the liaison officer, the postal authorities for the area were asked to submit the report on the proper form, and it would seem that a decision needs to be taken on this matter to bring the postal authority procedure into line with the procedure for other premises under the Act.

Offensive Trades.—There are nine premises in the City used for the purpose of offensive trades and the inspections made during the year confirmed that the premises were not creating a statutory nuisance.

Pleasure Fairs.—15 applications to hold pleasure fairs were received and related to 11 sites in various parts of the City. Two applications concerned Ancient Feasts for which no consent was necessary. One application to hold a fair was refused as the site was close to a busy road junction and, as the dates were immediately before Christmas, there was some risk of accidents arising from the holding of the fair.

Public Swimming Baths.—There are nine indoor swimming baths, five indoor within school premises, two open-air baths, five therapeutic indoor baths—three of which are in hospitals and two in schools for disabled children—and one indoor and one open-air on private school premises. All are equipped for continuous filtration and automatic chlorination. It is pleasing to report that an open-air public swimming bath which over the years has been subject of adverse comment, has now been reconstructed and modernised. Check sampling and testing of the bathwater continued during the year, although bath attendants or other responsible persons carry out daily testing for free chlorine and pH value.

The following samples of bathwater were examined during the year:—

Number submitted for bacteriological examination	39
Number of bath-side orthotolidine tests	48

All were satisfactory, apart from one sample found low in free chlorine probably due to recent back-washing of filters.

Rag Flock and Other Filling Materials Act, 1951.—The number of premises registered under the Act is 10, and no licences were issued in respect of premises used for the manufacture or storage of rag flock. The inspections made during the year confirmed that the material used complied with the Act, and with the increasing use of foam rubber and man-made materials, it would seem that the risk of infection caused by dirty filling materials is much reduced.

Houses in Multiple Occupation

During the year under review, steps were taken to replace the City's Scheme for Registration of Houses in Multiple Occupation, made under the 1961 Housing Act, by a new Scheme — the Sheffield (Registration of Houses in Multiple Occupation) Informatory and Regulatory Scheme 1970—made under the 1969 Act. The Scheme was approved by the Secretary of State for the Environment and became operative on 1st March 1971. Publicity was sought through the local press and radio, and handbills and posters were circulated for display, distribution and information to all Corporation departments, solicitors, estate agents, architects, libraries etc.

The new Scheme requires registration of houses prior to multi-occupation and gives powers of refusal to register or refusal to vary an existing registration on the grounds that the house is unsuitable or the person in control is not a fit and proper person. These additional powers should relieve the officers concerned of much of the burden of seeking out such premises and then serving notices requiring works or limiting occupancy under Section 19 of the 1961 Act. The publicity has resulted in numerous unregistered premises, which were in multi-occupation before the new Scheme came into force, applying for registration under Part I of the register. It is anticipated that during 1971 there will be a steady flow of applications for registration under Part II (the new Scheme) and it is proposed, that in every case the applicant will be met on site so that agreement can be reached as to future occupancy and works (including means of escape from fire) necessary to comply with the Council's standards. By this method, it is hoped that applications will be properly completed and registrations can therefore be granted (with or without conditions) and so avoid refusals and resulting legal battles. The Council's standards for amenities in such houses were amended during 1970 to include a supply of hot water piped to each of the sinks and/or washbasins fitted in the lettings.

Many enquiries were received during the year regarding Special Grants towards the cost of additional amenities in houses in multiple occupation, as provided for under the Housing Act 1969, but most were in respect of fire escapes and food stores which are not within the scope of the grant provisions. Of 12 formal applications, 5 were approved and completed, 3 are in the 'pipeline', 3 were not proceeded with and 1 is in abeyance.

Legal proceedings were instituted in respect of one property for non-compliance with Management Regulations and a notice served under Section 15 of the Housing Act 1961. Total fines were £22.

Enforcement action continued during the year, within the limits of available staff, and details are set out in the appendix (page 133).

Rents

Eighteen months ago, the Housing Act 1969 introduced a new system governing the rents of privately rented dwellings. The Government had in mind at that time that, if the existing stock of houses in the private sector was to be properly maintained in a good state of repair and prevented from deteriorating, owners must be assured of an economic rent.

The Act provides that if a house satisfies the qualifying conditions—i.e. is 'fit', has all standard amenities, and is in good repair—the owner, armed with a qualification certificate issued by the local authority, may apply to the rent officer for a 'fair rent' to be fixed. Rent increases for those houses already provided with the standard amenities (bath, wash hand basin, and sink, each with hot and cold water, and an internal watercloset) are authorised with effect from certain specified dates during 1971-72, depending on rateable values.

The public health inspector staff have been responsible for ensuring that the qualifying conditions are satisfied. 873 applications for qualification certificates (where all standard amenities are said to have been provided) were received during 1970. Of these, only 152 were granted, none were refused and 50 applications were withdrawn. It would appear that owners have been reluctant to proceed with their applications because of the cost of outstanding repairs. Of 316 applications for provisional approval certificates (i.e. where some standard amenities were lacking), 227 were granted, none were refused, and 9 withdrawn. Applications for standard grants were received in respect of the 227 provisional certificates granted, schemes of improvements were agreed, and grant aid approved.

Improvement Grants

The Housing Act, 1969, introduced a number of changes in grants given to improve houses which are sub-standard but not unfit. The maximum amount of grant was increased from £155 to £200 for the standard grant and from £400 to £1,000 for the discretionary grant (now called an improvement grant). A more significant change was the emphasis placed on the discretionary repair of houses improved, and an improvement grant may now include a contribution towards repairs. The new law has meant a careful inspection of houses for items of disrepair which should be remedied when the improvement work is carried out, and this is particularly so in tenanted properties, since these matters will be considered by the Rent Officer when fixing revised rents. Some owner-occupiers and owners of tenanted property were quick to take advantage of financial help to repair their property and there was a move from the standard grant to to the fuller improvement grant.

This is shown in the table below giving details for the last three years

	No. of Enquiries requiring an inspection	*Formal applications received*	*Applications approved*	*No. of grants paid*	*Amount of grants paid*
					£
Discretionary Grants					
1968	233	50	54	71	17,102
1969	251	68	71	58	16,727
1970	600	205	169	92	55,761
Standard Grants					
1968	2,740	1,680	1,459	1,408	137,551
1969	2,200	1,722	1.386	1,231	184,751
1970	2,100	1,786	1,562	1,293	136,930

Improvement Areas

Improvement of houses within the existing improvement areas declared under the Housing Act 1964 is proceeding steadily with greater progress in some areas than in others. Little has been achieved in the field of environmental improvement in the areas but new ideas have to be developed and considered in detail. No doubt the coming year will produce visible progress and enable the members of the community to see and judge the benefits to living standards that can accrue from these exercises.

In Walkley a feasibility exercise was to be carried out by the National Building Agency in co-operation with officers of the Corporation. Part of the area was originally programmed for demolition under the Housing Acts during the periods 1976-80 and 1981-85, and this appears to have stimulated the residents into action which has produced a marked betterment of the appearance of many houses and the creation of a virile action group to fight to retain the houses in the area. The portents for success of proposals for improvements are therefore encouraging.

Food Hygiene

The Food Hygiene (General) Regulations, 1970, were made in August 1970 and come into operation on the 1st March, 1971. These Regulations, which "consolidate and amend" the Regulations of 1960 and 1962, will be a disappointment to most local health authorities. The changes are minimal and have no significant relationship to the appreciable changes which have taken place in the food industry since 1960. Some of these changes were high-lighted in grim detail in the Reports for 1968 and 1969.

Barbecued chicken shops, fish and chip shops selling a variety of other hot foods, hot dog and hamburger stalls, and microwave cooked food in cinema and theatre foyers, are all mushrooming in our cities, but we are advised that these are not within the definition of "catering business"—i.e. " . . . the supply of food intended by the supplier for immediate consumption." Most of the customers eat their dogs hot but how does one define the 'intention' of the salesman ? The prevention of conditions which give rise to incubation of food poisoning organisms in high protein foods is of paramount importance. Surely, there is the same risk of food poisoning from "meats, fish, gravy, imitation cream, egg or milk or foods, containing those substances" sold to be eaten outside the premises or at home, as there is from eating such foods on "premises on or from which is carried on a catering business."

It is not surprising that in his Annual Report for 1969, the Chief Medical Officer, Department of Health and Social Security, mentioned these trends in the food trade and made the point that such businesses "are not catering premises inasmuch as there is no provision for the consumer to eat the snack on the premises." He requests local public health officers to show increased interest to enforce fully all the Regulations which apply. What is surprising, is that in spite of this concern voiced by such an eminent authority, the particular law requiring temperature control of certain foods in catering businesses has not been extended to apply to the same foods sold for consumption off the premises.

Similarly, powers to require registration of itinerant open food vendors are conspicuous by their absence from the new Regulations. In large urban areas the public health inspectors responsible for enforcement of the relevant Regulations are spread thinly on the ground and are presented with some difficulty running these 'mobiles' to earth.

In spite of our problems, the number of confirmed cases of food poisoning in the City fell from 83 in 1969 to 54 in 1970. 503 visits of investigation were made to homes of confirmed and suspected cases and to various sources of suspected infected food.

Legal proceedings were instituted in respect of a mobile confectionery saleshop involving five offences and total fines of £30; a retail general grocers shop, five offences and total fines of £50; and a restaurant in the City centre where there were two partners each with seven offences, total fines being £280. Legal proceedings in respect of two further restaurants were pending at the end of the year.

Lectures on food hygiene continue to be given to various organisations and groups, illustrated where possible with visual-aids.

NOISE ABATEMENT

Industrial Noise.—During 1970 the smoke inspectors (who also deal with industrial noise problems) investigated 64 complaints from members of the public concerning excessive noise emanating from industrial and commercial premises. In no instance has it been found necessary to take legal action under the Noise Abatement Act.

A number of complaints were received concerning noise emitted by dust collecting plants, extractor fans and air conditioning plants; all of these cases have been successfully dealt with by the fitting of silencers, by the fitting of suitable noise insulation material to the plants, or by the alteration of the position of the vents serving the offending machinery. One complaint was received from local residents concerning noise from a gas fired central heating boiler situated upon the flat roof of a large new supermarket: this problem was resolved by the fitting of a silencer to the outside flue of the plant. Large mobile compressors engaged in various kinds of road and demolition work were the cause of some complaints—usually the machines were not equipped with effective silencers, or they were the wrong type of compressor to use near occupied houses, shops or offices. Excessive noise from large building sites continues to be a serious problem because of the type of machinery used, such as large earth-moving plant, mobile compressors and concrete vibrators. Pneumatic drills are not the problem that they once were, as most of the contractors operating this type of plant now supply suitable mufflers. There were a small number of complaints where, upon investigation, it was considered that the noise in question was insufficient to cause a nuisance as the operations in question were of a temporary nature only. Finally, there were other complaints where little could be done because the houses were adjacent to industrial premises; happily the redevelopment which is taking place in the City is gradually obviating this problem.

Non-Industrial Noise.—64 complaints were received and involved 121 visits by the public health inspectors, many of which have had to be done outside office hours.

The complaints were often the result of the thoughtless use of radio and T.V. sets. However, the hard of hearing of necessity are obliged to 'turn-up' the sound, with the result that people in adjoining houses find the noise level a little high for comfort.

HOUSING PRIORITY ON MEDICAL GROUNDS

By Roger Chapman, M.B., Ch.B., D.P.H.
Deputy Medical Officer of Health

"None are happy but by the anticipation of change. The change itself is nothing; when we have made it, the next wish is to change again."

Samuel Johnson

During the year 1,567 applications were received for priority rehousing. These came from general practitioners, social workers, hospitals and private individuals—some were from other Corporation departments, including the Housing Department, others from Members of the Council and from Members of Parliament.

There was a wide spectrum of disability in these areas ranging from the infirmity of old age to ante-antal problems and including nervous and mental disorders, heart and chest conditions, blindness, limb amputations and post-operative complications. Other cases necessitated the consideration of factors such as overcrowding or alleged overcrowding, unsuitable housing conditions and domestic hardship while some related to requests for transfer involving the movement of Corporation tenants to other Corporation dwellings.

Apart from transfers from one Corporation dwelling to another, all applications were in the first instance investigated by a public health inspector and, where necessary, subsequently visited by the Deputy Medical Officer of Health and a Senior Public Health Inspector who together made 503 visits.

As applications for transfer of Corporation tenants are normally first investigated by a housing visitor, it was not necessary in every instance to make a further visit and it was possible to assess some from the medical evidence, the housing visitor's report and a knowledge of the local housing conditions; nevertheless the Medical Officer of Health personally visited 193 such cases.

Each case received careful consideration, having in mind the personal needs of the case, family circumstances and the type of accommodation required, and a total of 854 were recommended for priority rehousing, 507 of these being in respect of transfer of Corporation tenants.

The decision to recommend priority rehousing on medical grounds in an individual case can be comparatively simple when medical evidence of severe incapacity is presented or when the patient's condition is moderately severe, but weighted by other social consequences, such as lack of any caring person. In many cases, however, assessment can be extremely difficult and a decision is only possible following a visit by the Medical Officer of Health or his Deputy, and when they in turn have consulted with the superintendent public health inspector, the family doctor, health visitor, social worker or member of the hospital staff. A small number of cases are deferred for re-visit and re-assessment, but in the majority of cases a decision is arrived at on the spot and the position is explained to the patient or his relatives in order to obviate any misunderstanding by them of this decision. A visit by the Medical Officer is often of vital importance, since the medical certificate accompanying the patient's application on occasions fails to represent the full picture or, in contrast, over emphasises the incapacity. To recommend the type of accommodation and indicate the urgency of priority, the Medical Officer considers not only the degree and nature of the patient's handicap, but also the condition of his existing accommodation, the surrounding terrain, the presence or absence of caring persons in the neighbourhood and important social amenities. A close liaison with the Housing Department ensures that the Medical Officer in consultation with the superintendent public health inspector, is in a position to advise the patient on the availability of suitable accommodation in, or as near to, an area of his choice. The patient is urged however, at the time of the doctor's visit to be as co-operative and liberal as possible by indicating the quarter of the City into which he would be willing to move rather than a particular block of flats when a subsequent

visit is made by the housing visitor. It is stressed that the speed of rehousing could be directly proportional to the size of the area of his choice. The majority of these cases are, of course, elderly and some such as those with cerebral arteriosclerosis, find the concept of medical priority incomprehensible. They have over the years become dependent on uniformity and a routine existence. One can only feel great sympathy for these, our elderly citizens, who have to sever roots laid down sixty or more years ago and head for pastures new. It is unfortunately the case that in spite of medical priority being granted, this factor often results in an impasse where despite severe illness these patients elect to stay and die in abject circumstances with the often associated loss of dignity.

The 'City on the Move' is a great concept, providing the speed and degree of that move is moderated to suit the needs and pace of some of our elderly.

The table below illustrates the manner in which applications for priority rehousing were dealt with:—

Type of Case	*Number of applications*	*Number recommended*	*Number not recommended*	*Number requiring further investigation*
Various medical conditions ...	934	340	460	134
Overcrowding or alleged overcrowding	35	5	26	4
Associated with domestic hardship	12	1	11	—
Poor or unsuitable housing conditions	18	1	17	—
Transfer cases referred by Housing Manager affecting Corporation tenants only	568	507	61	—
TOTALS	1,567	854	575	138

The cases counted as not recommended include 7 where the applicants refused an offer of assistance and 5 where it was found that the applicants had died since making a request for rehousing. In one case, the applicant expressed a desire to be considered for Social Care accommodation and 5 had found their own accommodation.

During the year a total of 655 cases was rehoused into more suitable accommodation. Over the past 17 years, 13,258 applications for priority rehousing have been received, and of these, 4,450 have been recommended to the Housing Committee. The number of applications received during the year (1,567) was the highest number ever received and it now appears widely known that the Public Health Department is asked to assist the Housing Committee in its problem of trying to allocate as fairly as possible the available accommodation.

The following case histories illustrate some of the problems involved:—

1. A 37 year old man and his wife occupied a small dwelling comprising a livingroom and a small scullery on the ground floor, a bedroom on the first floor and an attic room on the second floor. The upper floor rooms were approached by very steep and winding staircases. There was no bathroom, internal sanitary convenience or hot water supply and the sanitary convenience was one of a block of conveniences in a common yard some 50 yards distant from the rear outer door.

   The man was a spastic, had curvature of the spine, was badly crippled in the lower limbs and could only get about with the aid of sticks; he was incontinent and this condition added to the problems in the accommodation in that there were no proper facilities for the daily washing of bedding and underwear.

   This couple was subsequently rehoused into a ground floor flat where there were internal sanitary arrangements and bathing facilities, a hot water supply and central heating—all these amenities being very essential in making the best of most unfortunate circumstances.

2. A young man who had amputations of both lower limbs lived with his mother in very poor accommodation, comprising a living room, a scullery and two bedrooms. This patient had been provided with artificial limbs and he had a motor tricycle, and whilst these aids made his life much easier, they were by no means the answer to all his problems.

Discussions took place between representatives of the Public Health Department, the Housing Department and the Department of Planning and Architecture, and it was found that a ground floor flat in course of construction could, with some adaptation such as widening of doorways to allow of easy movement of a wheelchair about the flat, the provision of a ramp access to the outer door and the provision of handrails in the bathroom, be made eminently suitable for occupation by this man and his mother. These adaptations were agreed upon and attended to, and since rehousing, it has been found that considerable benefit to the patient has accrued.

3. A report was received that a man and wife, along with their sons aged 13 years and 11 years, a daughter aged 10 years and twin daughters aged 3 years, were living in a house which had only one small livingroom, a very small bedroom and an attic which could not be classed as a habitable room; the bedroom and attic were approached by negotiating exceedingly steep, winding and narrow staircases. Sleeping arrangements were most difficult and some of the children were having to sleep on the floor because there was insufficient room for beds. The tenant was suffering from a very serious nervous disorder, his wife had post-operative complications, and very serious accumulative problems were being encountered.

   This family was subsequently rehoused into accommodation which alleviated the intolerable conditions.

THE PUBLIC MORTUARY

By Roger Chapman, M.B., Ch.B., D.P.H.
Deputy Medical Officer of Health

"Time goes you say? Ah no,
Alas, time stays. We go"
Henry Dobson (The Paradox of Time)

The Home Office Pathologist, together with highly trained technical staff, continue having to work in deplorable conditions in the existing 1904 autopsy room and reception area. It is to be hoped that the active planning and approval of new purpose built accommodation will proceed, perhaps incorporating combined University and local authority facilities in the form of a new Public Mortuary and Department of Forensic Science. This might later accommodate the Coroner's Court and staff, and would set a standard for the rest of the country in this specialist field, paving the way for the authority to assume the inevitable regional responsibilities.

The siting of this long awaited essential unit is of vital importance since it would serve not only as the nucleus of University teaching, forensic medical research and for early detection of potential hazards to the health of the local community but, at the same time, a public health service, by providing facilities for enquiry into sudden unexplained death. It would more easily satisfy all these disciplines and interests by being centrally placed and in this way readily accessible, especially to relatives of deceased persons.

The long awaited Brodrick report may well suggest a joint hospital public authority development as an economic alternative, but such a proposal would destroy the basic concept of a coordinated medico-legal institute serving a specialist team and result in another triparite system of control with its only too well known defects, problems of liaison and coordination of services. This too would not be a suitable formula for major centres of population and could lead to further delay in execution of its urgent provision, since there would be difficulties fitting it into one of the Regional Hospital Board's mammoth 10 year plans. In the interim the state of the existing premises, a 'community sore', contributing a serious risk to health of the staff and indirectly the public, would fester on untreated. This is a unique opportunity for a 'City on the Move' to attain yet another first and not simply keep up with other major authorities but forge ahead.

THE MONITORING OSCILLOSCOPE

This instrument has now been modified so that the deflections on the scale are comparable with the oscilloscopes used within the resuscitation centres in hospitals. After a great deal of discussion between representatives of the United Sheffield Hospitals, ambulance personnel, the Coroner, police, undertakers and the Public Health Department, the procedure for dealing with cases of barbiturate or narcotic overdosage, hypothermia, or recent unexpected demise, has been agreed. The mortuary oscilloscope is now utilised for research purposes for investigating the period of electrical activity which remains in the myocardium after death. In addition, in the very exceptional case where, in spite of death having been confirmed, the relatives need reassurance that life is extinct, it enables any element of doubt to be resolved.

RODENT CONTROL

"He who hesitates is sometimes saved"

James Thurber

The Rodent Control section continued to eradicate rodent pests from buildings, sewers, rivers and water courses and to reduce the number of feral pigeons.

Sewer Disinfestation.—Experience has shown fluoracetamide to be the most successful poison to use following upon a test bait of sewer warfarin. During the early months of the year, 4,486 manholes on the sewer systems in the built up areas of the City were test baited and infestation was found at only eight.

One in every ten sewer manholes in the sewer systems in the outlying and less congested areas, was test baited and there was evidence of infestation at only one of the 1,208 manholes tested.

Fluoracetamide was applied on four occasions at intervals of three months to all sewer manholes throughout the City which had been found to be infested, and to the associated manholes, totalling 54.

River and Watercourse Disinfestation.—Routine investigations were carried out three times during the year along the lengths of the Don, Loxley, Don Goyt, Sheaf, Carbrook, Meersbrook, Frazer Brook, Shirtcliffe Brook, Porter, Bagaley Brook, Rother, Ochre Dyke, Tongue gutter, Hartley Brook Dyke, Chapel Flat Dyke and the Shirebrook. Sausage rusk was used for baiting purposes and the poisons used were zinc phosphide and arsenious oxide; 10,422 baiting points were positioned and takes of bait were recorded at 1,465 of the points.

In all rodent control activities, careful consideration is given to the siting of baits and poisons to ensure that they are placed in positions inaccessible to humans and animals other than rats and mice. On completion of the treatments, visits are made to confirm that all dead rats and mice and all uneaten bait and poison are cleared from the premises.

Disinfestation of Buildings and Lands.—The Rodent Control Service still operates on a 'no charge' basis in respect of domestic premises but a charge is made for the services at all other buildings and lands.

Applications and enquiries dealt with by the Rodent Control Service during the years 1968-70 are given below, together with the numbers of baiting points positioned.

	Year 1968	*Year 1969*	*Year 1970*
Number of applications and enquiries dealt with (rat infestation)	1,809	1,946	2,022
Number of applications and enquiries dealt with (mice infestation)	1,548	2,288	2,620
Number of baiting points laid	48,410	56,331	60,010
Visits made by rodent operatives following complaints of rats and mice	13,838	17,048	18,403

Public health inspectors and rodent operatives take every opportunity of advising owners and occupiers of preventive measures, and the inspectors also place emphasis on this aspect when giving lectures on their duties and other ancillary matters.

The senior superintendent public health inspector, who is a member of the West Riding Pests Control Committee, was invited to give a lecture to the committee members during December 1970 on the subject of rodent control in an urban area. The lecture was well received by the members present and outlined many problems respecting rodent infestations, and measures needed to combat them, as well as describing in detail how rodent control activities were carried out in the City of Sheffield.

Pigeon Control.—During the year, 2,483 pigeons were taken and humanely destroyed, 1,486 by traditional methods and 997 by the use of stupefying bait. The total number of pigeons disposed of since 1959 now amounts to 23,488.

WELFARE SERVICES FLEET, REPAIR WORKSHOPS AND DISINFECTING STATION

By E. M. Lewis, R. Tech. Eng., M.I.R.T.E., M.I.M.I., A.M.B.I.M.,
Transport Officer and Disinfecting Station Superintendent

"Either I will find a way or I will make one"

Sir Philip Sidney

Osgathorpe disinfecting station and transport repair workshops were opened in 1960. The workshops cater for the operation, maintenance and repair of a fleet of over 180 local authority vehicles, including ambulances, covering all personnel carrier requirements, school meals, meals on wheels and incontinence pad services. The total mileage covered by the fleet during 1970 was approximately 1,700,000 miles. The workshop unit incorporates a body repair and spray painting section. A training scheme for engineering and body work apprentices is in operation. Negotiations were proceeding with ministry officials with a view to the Depot becoming authorised as a vehicle testing station, to be established early in 1971.

Industrial action took place on the 5th and 13th October at all the Welfare Services Depots, and on the 26th January, 1971 the fitters at Osgathorpe and Corporation Street came out on a one-day strike. These resulted in the total loss of approximately 2,150 hours' working time. The first day's strike on the 5th October, 1970 came most unexpectedly and resulted in no 'meals on wheels', school meals or meat being delivered, and all appointments for transport were cancelled.

Some prior warning of the strike on the 13th October was given and this enabled alternative arrangements to be made to cover the most essential services, e.g., 'meals on wheels' were delivered by taxis. The strike by the fitters in January, 1971 caused very little disruption to essential services because any vehicles becoming unserviceable were replaced by alternative vehicles.

General Stores.—The care and after care service grows year by year and there is extensive accommodation for the storage of a wide variety of equipment. Approximately 100,000 incontinence pads are held in stock and four vans are fully occupied in ensuring this service for six days per week throughout the year.

Disinfecting Service.—All care and after-care equipment which is returned is thoroughly cleaned and disinfected before being transferred to the stores for re-issue. The daily demand on the two 'Manlove Alliott' motor autoclaves is constant but because of the increasing use of synthetic materials, more disinfection has to be carried out using aerosol formaldehyde dispensers instead of steam. Vans call daily at the Sheffield hospitals to collect bedding for disinfection, and library books which have been exposed to infectious diseases such as scarlet fever, meningitis or dysentery are collected and disinfected in a formaldehyde gas chamber before being returned to the City Libraries.

Details are given below of the treatment of verminous persons, disinfestation of premises and disinfection of articles undertaken during the year 1970.

Cleansing of verminous persons	54
Treatment of scabies	734
Bathing at home or station	78

Disinfestation Service.—An adequate stock of new and approved insecticides together with the necessary dispensing aids is maintained and a well-equipped vehicle is in daily operation to eradicate insect pests in business, private and corporation premises. Many requests are received from public health inspectors for the removal of filthy and verminous articles to the Penistone Road destructor.

Premises disinfested for bugs, fleas, silverfish, steam fly, etc.:—

Corporation houses	500
Other Corporation premises	89
Private houses	262
Miscellaneous premises	147

Articles disinfected during the year (infectious deseases):—

Number of journeys from station to hospital and dwellings in connection with steam sterilisation of bedding etc.	454
Number of items disinfected	3,069

Meals on Wheels Service.—By the end of 1970, 12 vehicles were in operation each day.

Organised Outings—Handicapped Persons.—A large number of handicapped adults and children were conveyed to seaside and countryside on organised outings during 1970 by the special vehicles of the fleet. Several journeys were organised to take handicapped persons and hospital patients of all ages round the City illuminations at Christmas.

Safe Driving Awards.—Every driver was entered for the Royal Society for the Prevention of Accidents' national safe driving competition. The results were as follows:—

Star Bar and 20 years Brooch ...	2	Bar up to 5 years Medal	13
20 years Brooch	1	5 years Medal	2
Bar up to 20 years Brooch ...	3	Diploma 1-4 years	28
Bar up to 15 years Medal	1		

HOUSING AND SLUM CLEARANCE

By H. Gregory, M.A.P.H.I.

Superintendent, Clearance Areas Section

"Let him that thinketh he standeth take heed lest he fall"

I Corinthians 10, 12

Slum clearance is designed to deal with an aggregation of houses which, when judged by the standards set out in section 4 of the Housing Act, 1957, are unfit for human habitation and their demolition is considered to be the most satisfactory method of dealing with these houses.

The only matters which may be taken into account in determining whether a house shall be deemed unfit for human habitation are those listed in section 4. These matters refer to the physical characteristics of the house itself, and the environment in which houses are situated is not a matter which may be taken into account. It is, however, a matter to be considered when programming the clearance of a large number of areas of unfit houses which differ both in their degree of unfitness and their environment. There is, for instance, general agreement that areas of bad housing in bad environments should be the first priority, but there may be divergence of opinion as to which should receive priority when programming bad housing in good environments or better houses in bad environments.

When slum clearance was resumed in 1956, the overriding factor was the need to provide sites suitable for housing redevelopment. This necessitated clearing the houses from areas which were zoned for residential redevelopment. Parkhill, Netherthorpe, Woodside, Lansdowne, Burngreave, Broomhall and Kelvin and many smaller areas which have been cleared and redeveloped for housing are the results of this policy. These areas contained a high concentration of back-to-back houses, a legacy of the industrial revolution which earned for Sheffield a degree of notoriety. This type of housing with all its inherent defects provided a very low standard of accommodation and was properly given the first priority. Their clearance has received little acclaim and students of planning and architecture, who are still being directed to Sheffield to see these disreputable areas, must now be content with the written evidence in their textbooks.

The areas of unfit houses in the industrial districts of Attercliffe, Neepsend, St. Philips and Grimesthorpe were programmed for the 1965-70 period. This policy received criticism from many families living amongst the noise, dirt and fumes of the industrial valleys, who considered these environments should determine the priority. During the past five years, several thousands of these houses have been represented in clearance areas and this action appears to have been favourably received. There was little opposition from owners as may be illustrated by the fact that there were objections in respect of only 215 of the 3,642 houses included in the 52 clearance areas declared in the Attercliffe district. The whole operation has been carried out with little publicity and would appear to have been missed by some critics who are still demanding that the Council should be dealing with conditions in Attercliffe. The action required to condemn these houses has been completed but, owing to the lengthy procedure necessary to acquire the sites and endeavour to satisfy the needs of all the families to be rehoused, it may still be two to three years before the houses are demolished.

There are, however, a small number of houses in the Attercliffe area which, when judged by the criteria of section 4, were not considered to be unfit and could not be included in the clearance areas. These few houses may pose a problem when the future redevelopment of this area is to be carried out since it is unrealistic to envisage a small number of families living in the environment of industrial development with none of the ancillary amenities of shops or schools.

A number of small groups of very old cottages which were scheduled for demolition before 1939 were also deferred to this third post-war 5 year programme. As regards their degree of unfitness these houses are worse than the majority of the houses in the industrial areas which have been condemned as unfit but, being often located in attractive residential districts, have a superior environment. However, since the introduction of the Civic Amenities Act it would appear that these old cottages have acquired a historical or architectural value and add charm to the street scene. Any suggestion that these unfit houses should be demolished raises a storm of protest from the preservationists. These houses pose the problem of how the Council may satisfactorily discharge their duty under the Housing Acts to deal with unfit houses without requiring their demolition. If the houses are not to be demolished they must be rendered fit for human habitation and the Authority has no power to compel anyone to carry this out. Alternatively the occupants must be rehoused and the premises closed as dwellings, in which case there is a real danger of them being so destroyed by vandals as to require demolition.

The preservationists claim that there is a great demand from people who are willing to purchase this type of property and transform them into comfortable dwellings with modern amenities and, in support of this claim, examples are cited of this having been accomplished in Derbyshire and the Southern counties. This is not disputed but there has been no evidence of such a demand for these properties in Sheffield.

It needs to be emphasised that these old cottages are, in their present condition, unfit for human habitation and their occupants are living in unsatisfactory housing conditions. Under the provisions of the Housing Acts it is mandatory for the Authority to deal with these conditions in accordance with the procedure laid down in the Acts. The first step is to remove the occupants from these dwellings into satisfactory houses. Whether or not the buildings shall be demolished will depend upon whether anyone is prepared to spend large sums of money to render them fit for human habitation. In order to satisfy the desires of the preservationists this must also be carried out in such a manner so as not to destroy that which they desire to preserve. Obviously if this exercise is to be undertaken merely to provide a home it is not an economical proposition. The prospect of rows of red brick, stucco and red tiled 'semis' in an area of urban development, together with the congestion and noise of an urban community, is not to be compared with the open grandeur of the Peak District or the serenity of the rural South. Only if there is some delectable environment to be enjoyed that is otherwise unobtainable is the wealthy enthusiast likely to consider the cost worthwhile, secure in the knowledge that the Planning Authority will not allow any future development to destroy the environment and devalue the capital investment.

The Sheffield enthusiasts for the preservation of old cottages, must have more than a third party interest in these properties and ample funds at their disposal if they are to achieve their ambitions and, whatever the outcome of their endeavours, the occupants of these dwellings should not suffer owing to their intervention. At present families are being required to occupy these unfit houses for long periods in order to prevent further deterioration or damage by vandals until the fate of the buildings is decided.

At the commencement of the Third Five Year Programme of slum clearance in January 1966, the City Council decided to accelerate the clearance of unfit houses in the City by increasing the allocation to two thirds of all available lettings. It was estimated that the total number of new houses and relets would be 3,600 per year. In order to provide the required number of tenancies it would be necessary to represent approximately 2,400 unfit houses per year, a total of 12,000 for the five year programme, at the same time allowing for the fact that some fit houses may be included in Compulsory Purchase Orders.

This third phase ended on the 31st December, 1970. The following table shows comparable statistics for the number of unfit houses represented during the five years

1966-70, together with the number and percentage of objections received and the number of Public Enquiries held to deal with them:—

Year	*No. of houses represented*	*No. of orders opposed*	*No. of houses in orders opposed*	*No. and % of houses subject to objection in opposed orders*	*No. of Public Inquiries held*
1966 ...	2,545	25	794	196 (24·6%)	13
1967 ...	2,395	47	1,699	508 (29·9%)	11
1968 ...	2,004	25	1,964	399 (20·3%)	10
1969 ...	2,064	28	2,094	411 (19·6%)	11
1970 ...	2,176	14	1,692	150 (8·8%)	6
	11,184	139	8,243	1,664 (20·1%)	51

In addition to the 11,184 unfit houses represented in clearance areas, a further 331 individual unfit houses were dealt with either by demolition or closing orders, thus a total of 11,515 unfit houses were represented during the five year period. 8,819 families were rehoused from houses included in representations in Clearance Orders or Compulsory Purchase Orders during this same period.

During 1970, 4 Clearance Orders and 19 Compulsory Purchase Orders containing 1,787 houses were confirmed and 2,216 families have been rehoused from clearance areas.

At the end of the year, the number of houses in operative Orders where rehousing had not yet been carried out amounted to 2,220. Five Orders containing 459 houses will not become operative until 1971. A further 13 Orders containing 1,226 houses have been submitted and await confirmation. 18 clearance areas containing 1,305 houses represented during the year are not yet the subject of Orders. There are, therefore, 5,210 houses in various stages of the administrative procedure, which is more than sufficient to provide the tenancies likely to become available during the next two years.

In addition to the houses inspected for representation in clearance areas during the year, a further 405 houses offered to the Corporation for purchase in advance of requirements were also inspected. The Estates Surveyor was advised whether these were of a type likely to be represented as unfit for human habitation in the foreseeable future.

Various departments were given information of any slum clearance proposals likely to affect houses subject to enquiries for the following purposes:—

Relating to supplementary information required regarding searches of the land charges register	8,516
Applications for improvement grants	2,412
Applications for mortgages	914
Applications for permission for change in usage of premises	25
Applications for Qualification Certificates	617

CLEAN AIR

By J. W. Batey, D.P.A., C.Eng., M.I.Mar.E., F.R.S.H.,
Superintendent Smoke Inspector

"In the city, time becomes visible"

Lewis Mumford

The No. 17 (Southey Green) and the No. 21 (Firth Park) Smoke Control Orders became effective on 1st July and 1st December respectively. In addition, the No. 25 (Burngreave) and the No. 18 (Brightside) Orders were confirmed by the Minister on 30th April and 14th November respectively. At the end of the year only Attercliffe and the Birley/Mosborough areas remained to be dealt with in the smoke control programme, but work on surveying Attercliffe had begun.

As in the past, the volumetric gauges demonstrate the effect of these measures on the air we breathe.

Microgrammes of Smoke per Cubic Metre of Air
Lowest and Highest Monthly Readings for 1960 and 1970

Site	*Lowest*	*Highest*	*Lowest*	*Highest*
	1960		1970	
Surrey Street	40	400	19	92
Park County School	90	520	21	97
Newhall Road County School ...	160	600	24	197
Ellesmere Road County School	110	630	30	172
Pye Bank County School ...	60	340	14	115
St. Stephen's C.E. School ...	70	500	10	82
Milton Street Works	40	600	17	92
Sharrow Lane County School ...	90	600	14	66
*Manor Clinic	78	311	16	77
*Turton Platts, Wincobank ...	57	262	28	143
Totals	795	4,763	193	1,133

*These two gauges came into operation in March, 1963

In last year's report it was suggested that the increasing use of natural gas would have a favourable effect on the sulphur dioxide readings. This has proved to be the case and, after rising for three years, the yearly average for all the gauges has dropped from 163·2 microgrammes per cubic metre (1969) to 159·9. Looking at the last decade the contrast between the lowest and highest readings recorded for sulphur dioxide is illustrated in the following table:—

Microgrammes of Sulphur Dioxide per Cubic Metre of Air
Lowest and Highest Monthly Readings for 1960 and 1970

Site	*Lowest*	*Highest*	*Lowest*	*Highest*
	1960		1970	
Surrey Street	152	809	72	247
Park County School	116	455	69	211
*Newhall Road County School ...	97	475	126	345
Ellesmere Road County School	74	246	107	261
Pye Bank County School ...	109	360	101	242
St. Stephen's C.E. School ...	86	337	63	219
Milton Street Works	111	543	79	273
Sharrow Lane County School ...	60	283	51	167
†Manor Clinic	96	273	69	176
†Turton Platts, Wincobank ...	95	274	88	308
Totals	996	4,055	825	2,449

*Gauge moved to Attercliffe Baths, July, 1970.

†These two gauges came into operation in March, 1963

Full tables are included at the end of this Report but the average smoke measurements highlight the dramatic improvement in air quality over the years.

Smoke, Microgrammes per cubic metre, for all Volumetric Gauges for 1959-1970 (per month)

Year	*Smoke*	*No. of Gauges*	*Average per Gauge*
1959	2,550	8	318·7
1960	2,170	8	271·2
1961	1,760	8	220·0
1962	1,700	8	212·5
1963	1,472	8	184·0
1964	1,706	10	170·6
1965	1,323	10	132·3
1966	1,084	10	108·4
1967	944	10	94·4
1968	919	10	91·9
1969	788	10	78·8
1970	649	10	64·9

Some Statistics for 1970

Number of chimneys observed	13,288
Number of minutes of smoke emitted	2,371
Average minutes of smoke emission per half hour	0·18
Number of abatement notices served	12
Number of complaints dealt with	278
Letters sent to firms regarding smoke emission	45
Number of prosecutions	3
Number of plans scrutinised	491

FOOD INSPECTION

By G. A. Knowles, F.R.S.H., F.A.P.H.I.

Superintendent Food Inspector

"How camest thou in this pickle?"

William Shakespeare (The Tempest)

This record of the year's work of the food inspection services again demonstrates the wide range of duties carried out. The number of unsatisfactory samples, analysed under the Food and Drugs Act, showed an increase and it is interesting that two of the prosecutions taken related to milk containing considerable amounts of added water. This would indicate that this type of offence is always liable to recur and demands that vigilance in sampling be maintained. The number of animals inspected and slaughtered for human consumption in the City was 301,995, a slight decrease on previous years. Visits by the food inspectors showed an increase as did the amount of food condemned by them. The sale of mouldy and stale food in the country as a whole claimed the attention of the national press and there was a call for open coding of prepacked foodstuff. This is a debatable point, since what is really essential is that all food offered for sale should be fit for human consumption. Ultimate responsibility must rest with the food retailer, who, by the exercise of intelligent care can ensure that the food he sells is in a satisfactory condition. Considering the vast amount of food sold, however, the number of justified complaints is very small and the majority of these could have been eliminated by the exercise of ordinary care.

GENERAL FOOD INSPECTION

This year 10,053 visits were made to inspect food supplied at the wholesale fish, fruit and vegetable markets; wholesale and retail provision and foodstores; cold stores, retail markets, butchers' shops, fish shops and the one horseflesh shop in Sheffield. These visits resulted in 89 tons of food being condemned as unfit for human consumption by the food inspectors. The unfit food was voluntarily surrendered by the owners and possession taken at the time of inspection. It was then removed to the Corporation Destructor at Penistone Road and destroyed by burning.

Visits made by the Food Inspectors

Visits to markets and wholesale food premises	5,449
Visits to retail food shops	2,149
Visits to horseflesh shop	66
Visits to butchers' shops	1,767
Visits to wet fish shops	622
Total Visits	10,053

A table giving the details of the food condemned in 1970 is on page 146 in the appendix.

SAMPLING FOR ANALYSIS

1,607 formal and informal samples of food and drugs were taken and analysed during the year of which 79 samples (4·9 per cent) proved to be unsatisfactory. Of the total samples taken 502 were milk, 1,091 general foods and 14 were drugs. Included in the milk samples were 39 samples submitted for the detection of the presence of antibiotics, and all the samples gave negative results. In addition to the milk samples submitted to the Public Analyst, 214 samples were examined for quality by the food and drugs inspectors.

Legal Proceedings.—Legal proceedings taken during the year for offences against the Food and Drugs Act resulted in penalties totalling £155.12.6 being imposed. These were in respect of selling milk containing added water (2 cases), pork sausage deficient in meat content (2 cases) and a malt loaf containing a wire nail (1 case).

In addition to the cases taken to prosecution warnings were given in the cases detailed below:—

Food or Drug	*Offence*	*No. of Cases*
Milk	small amounts of added water	8
Milk	milk fat deficiency	1
Beefburgers	slight deficiency in meat content	4
Beef casserole	slight deficiency in meat content	1
Boneless chicken in jelly	slight deficiency in meat content	3
Butter	slight excess of water content	2
Chicken spread	slight deficiency in meat content	2
Cocktail cherries	non-declaration of preservative	1
Cream cheese	misdescription	1
Fish cakes	deficiency in fish content	5
Ham paste	slight deficiency in meat content	1
Meat pies	slight deficiency in meat content	1
Minced beef with gravy	slight deficiency in meat content	1
Mini steak	misdescription and non-declaration of preservative	1
Pickled red cabbage	non-declaration of added colouring	1
Polony	deficiency in meat content	1
Pork sausage	deficiency in meat content	7
Potted beef	excess water content	2
Prepared chips	excess preservative	1
Salmon spread	deficiency in fish content	2
Sterilised cream	deficiency in milk fat	1
Stewed steak and gravy	deficiency in meat content	2
Stuffed pork roll	deficiency in meat content	1

Where warnings were given, follow up samples were taken to ensure that the offence had been remedied.

THE MILK SUPPLY

Sheffield's milk supply consists wholly of Designated Milk and is retailed exclusively in bottles and cartons. The types of milk sold are Pasteurised, Channel Island Pasteurised, Sterilised, Ultra Heat Treated and Untreated Milk. A small quantity of homogenised pasteurised milk is retailed by three dairies. The whole of the milk supplied to school children is pasteurised.

The estimated total daily consumption in the City for 1970 was 44,097 gallons. This figure includes milk supplied to schools and is equivalent to a consumption of 0·67 pint per head of population. The sale of heat treated milk totalled 43,660 gallons or 98·96 per cent of the total supply. Of this amount pasteurised milk represented 42,133 gallons including 1,690 gallons of Channel Island pasteurised milk, 1,491 gallons were sterilised milk and 36 gallons were Ultra Heat Treated milk. Untreated milk sales totalled 437 gallons or 1·04 per cent. This latter milk was wholly farm bottled and came from farms in the City and in the adjoining area of the West Riding of Yorkshire.

The average quality of the milk consumed, as judged from 463 samples of milk analysed during the year was 3·77 per cent of milk fat and 8·57 per cent of milk solids other than milk fat. This is well above the minimum standard for genuine milk laid down by the Sale of Milk Regulations, 1939 viz:— of 3 per cent of milk fat and 8·5 per cent of milk solids other than milk fat. The average quality of the 42 samples of Channel Island milk taken during the year was 4·51 per cent of milk fat and 8·83 per cent of milk solids other than milk fat. The standard for this milk is a minimum milk fat content of 4 per cent. Control of the milk supply is achieved by testing samples obtained daily from milk distributors as they are delivering to consumers in the City and from milk bars and vending machines. Farm and tanker supplies of milk to the Sheffield dairies are also checked. 25 visits were made to pasteurising dairy premises to secure compliance with the Milk and Dairies Regulations and the Milk (Special Designation) Regulations. There were four licensed pasteurising dairies in operation in the City during the year. One dairy ceased business in October having been acquired by one of the other City dairies. The milk in all cases was pasteurised by the 'High Temperature

Short Time' method. Pasteurised milk from one dairy outside the City was sold in Sheffield during the year. The sterilised milk sold in the City came from three sterilising dairies situated in areas outside Sheffield. The Ultra Heat Treated milk sold in Sheffield came from two dairies outside the City.

349 samples were taken and submitted for bacteriological examination. All samples satisfied the phosphatase test which indicated that the milk had been efficiently pasteurised. The tests on 14 samples were declared void because of the prevailing high atmospheric temperatures. Four samples failed the methylene blue test which measures the keeping quality of milk. Repeat samples proved satisfactory. All the 107 samples of sterilised milk satisfied the turbidity test and 2 samples of Ultra Heat Treated milk satisfied the appropriate test. 23 samples of untreated milk were submitted to the methylene blue test. There were 6 failures and these were reported to the Ministry of Agriculture, Fisheries and Food. 5 samples of untreated milk were examined for the organisms of brucella abortus. All gave negative results.

ICE CREAM

95 samples of ice cream and 1 sample of ice cream mix were submitted for bacteriological examination. 54 samples gave Grade I results, 15 were placed in Grade II, 12 in Grade III, and 15 in Grade IV. Coliform bacilli were found in 29 of the samples.

Samples placed in Grades I and II are considered satisfactory. Manufacturers of samples giving unsatisfactory results were notified and advised, and follow up samples were taken to ensure that the necessary improvement had been made.

BACTERIOLOGICAL EXAMINATION OF OTHER FOODS

1 sample of beef paste and 1 sample of beef spread were submitted for bacteriological examination. The results were satisfactory.

MEAT INSPECTION BYELAWS

These local byelaws were enforced during the year. Unstamped meat was required to be taken to the Corporation abattoir for examination before being delivered to butchers' premises in the City. The food inspectors made 1,767 visits to butchers' shops to examine the meat deposited for sale to ensure that it had not escaped the proper inspection and was fit for sale. Similar visits were made to other food preparation premises.

Details of visits are shown on page 113.

MERCHANDISE MARKS ACT, 1926

The various orders made under the above Act require imported apples, butter, tomatoes, meat, bacon and ham, dried fruit, eggs, oat products, poultry and cucumbers to be marked on exposure for sale with an indication of origin. 666 visits were made to various food premises to enforce the provision of the Act.

PHARMACY AND POISONS ACT, 1933

Premises on Local Authority's list of persons entitled to sell poisons included in Part II of the Poisons List (on December 31st 1970)	360
Premises added to the list during the year	19
Number of routine visits and inspections during the year	90

FERTILISER AND FEEDING STUFFS ACT, 1926

10 samples of fertilisers and 3 samples of feedings stuffs were taken and submitted for analysis during the year. The samples were all satisfactory.

FOOD HYGIENE

Particular attention is paid to any infraction of the Food Hygiene Regulations observed by the food inspectors whilst they are carrying out their normal duties at food premises. The Superintendent Food Inspector spoke to a variety of audiences during the year on food hygiene and associated matters. Requests are received every year for such lectures and talks from food trade organisations, food firms, community and religious organisations.

EXTRANEOUS MATTERS IN FOOD

Complaints from members of the public regarding the unsatisfactory condition of food, including extraneous matter in food, totalled 277 during the year. The foods implicated were many and varied, and included meat and meat products (75 cases), bread and confectionery (96 cases) and milk (12 cases). All the complaints were investigated, and the complainants expressed themselves as satisfied with the action taken by the department. Proceedings were taken in the case of a malt loaf containing a wire nail and a conviction was secured.

MEAT INSPECTION

A total of 301,995 animals was slaughtered at the three slaughterhouses in the City during the year. All were inspected at the time of slaughter; 325 tons of meat and offal were condemned as unfit for human consumption. The main statistics on meat inspection are contained in a combined table on page 144.

Cattle slaughtered in the City during the year:

Bullocks	24,055
Heifers	8,011
Cows	22,218
Bulls	203
TOTAL	54,487

In addition 630 calves, 118,754 sheep, 9 goats, 128,044 pigs and 71 horses were slaughtered. All animals were humanely stunned before slaughter with the exception of 11,420 animals which were slaughtered by the permitted Mohammedan and Jewish religious methods. All the slaughtermen employed in the slaughter of animals must hold a slaughterman's licence which is only issued by the Local Authority to persons competent to carry out such work. Certification of new applicants and consent to renewal of existing licences is carried out by the Superintendent Food Inspector.

Private Slaughterhouses.—There were 71 horses slaughtered at the private horse slaughterhouse and 7 cwts. of meat and offal was condemned as unfit for human consumption.

At the other private slaughterhouse 285 oxen and 447 sheep were slaughtered and inspected. There was no case of total condemnation but 19 cwts of meat and offal were condemned as unfit for human consumption and dealt with in the digester plant at the abattoir. Two cases of localised cysticercus bovis infestation were found. In each case the animal involved was a heifer. Meat inspection duties at this slaugherhouse are carried out by the food inspectors.

Details of slaughtering and inspection.—Information about the number of animals slaughtered and inspected, and the quantities of meat and offal which were condemned as unfit for human consumption are to be found in the tables on pages 145-146. Of the 301,995 animals slaughtered and inspected during the year 664 whole carcases were found to be in a diseased condition and were condemned. In a further 112,300 carcases some part of the animal or organ was condemned.

Tuberculosis.—4 bovine carcases suspected of being affected with tuberculosis were reported to the Ministry of Agriculture, Fisheries and Food. One was confirmed as being positive.

Cysticercus Bovis.—140 animals were found to be infected during the year. These included the 2 cases from the private slaughterhouse. 138 had localised infestation and, after the affected parts had been condemned, the carcases were placed in refrigeration for three weeks at a temperature of not more than 20°F. The remaining 2 cases (both bullocks) had a generalised infestation and the carcases and offal were condemned. The 140 animals affected represented 0·26 per cent of the total number of cattle slaughtered. This was considerably less than the previous year when 308 animals or 0·59 per cent of all cattle slaughtered were affected.

The types of cattle involved were:—

Bullocks	71	(including 2 cases of generalised infestation)
Heifers	33	
Cows	34	
Bulls	2	
TOTAL	140	

These figures bear out the experience of previous years that this disease is found to be more prevalent in the younger animals.

Cysticercus Ovis.—One carcase with offal, of a sheep slaughtered in the abattoir was condemned because of generalised infestation.

Meat from outside sources.—Meat brought to the abattoir for inspection in compliance with the byelaws included 38 tons of beef, 51 sheep carcases and offal, 235 carcases of mutton, 33 carcases of beef and 2 calf carcases and 1 calf. A total weight of 13 cwts. of these importations was condemned.

Wholesale Meat Market.—During the year the total weight of meat found to be unfit for human consumption and condemned was 17 tons.

Disposal of condemned meat.—During the year a total of 325 tons of condemned meat was handed over to the Markets for conversion, in their solvent digester plant at the abattoir, into animal feeding meals, fats and fertilisers.

Materials for research at University and City Hospitals.—Supplies of blood, animals' organs etc., were collected regularly by the University and hospital laboratories and used in their researches in the health fields.

Diseases of Animals Acts.—The Public Health Department is responsible for the discharge of the non-veterinary functions of the above Acts within the City and many of these functions, in particular the issuing of Animal Movement Licences and the supervision of the cleansing and disinfection of animal carrying trucks, are carried out by the meat inspection staff at the abattoir. During 1970 the cleansing and disinfection of 1,606 vehicles was supervised.

GENERAL SUMMARY OF WORK OF FOOD INSPECTION SERVICE FOR THE YEAR 1970

Visits

Number of visits made by the food inspectors:—

To markets and food premises	7,598	
To butchers' shops	1,767	
To wet fish shops	622	
To horseflesh shop	66	
In connection with Merchandise Marks Act	666	
In connection with Milk and Dairies Regulations	25	
In connection with Pharmacy and Poisons Act	90	
	——	10,834

Total weight of unfit food condemned and destroyed:—

Tons	*Cwts.*
89	5

Sampling

Number of samples taken:—

Food and Drugs Act, 1955—for analysis by Public Analyst	1,607	
Milk samples informally examined by food and drugs inspectors	214	
Ice Cream—for bacteriological examination	96	
Food for bacteriological examination	2	
Fertilisers and Feedings Stuffs Act—for analysis by Public Analyst	13	
		1,932

Designated Milk Samples.—for bacteriological examination:—

Pasteurised	349	
Sterilised	107	
Ultra Heat Treated	2	
Untreated	23	
Untreated—Brucella Abortus	5	
		486
		2,418

Meat Inspection

Animals slaughtered and inspected:—

Cattle	54,487
Calves	630
Sheep	118,754
Goats	9
Pigs	128,044
Horses	71
TOTAL	301,995

Total weight of all meat and offal condemned as unfit for human consumption and processed in the abattoir digester plant:—

Tons	*Cwts.*
325	3

WATER SUPPLY

"Seek not for fresher founts afar,
Just drop your bucket where you are"

Sam Walter Foss

The water supply to the City is provided mainly by the Sheffield Corporation, but an area to the south-east, which was brought within the City boundary in 1967, is supplied by the North Derbyshire Water Board. The following information is supplied by the two Undertakings:—

A direct piped water supply is provided for a population of over 524,000 in 189,360 dwellinghouses. The Corporation supply is derived from moorland gathering grounds to the west of the City and from the Yorkshire River Derwent at Elvington. The moorland supply is clarified by filtration, chlorinated and has lime added to prevent plumbo-solvent action. The river supply undergoes softening, clarification, filtration and superchlorination. Three source works contribute to the North Derbyshire supplies and at each source chlorination is practised. Distribution is from covered service reservoirs. Regular examination is made of raw and treated waters, and chemical and bacteriological analyses are made.

In view of the variety of sources of supply, there is a wide variation in the chemical analysis of the water samples, as shown in the following table:—

	Sheffield Corporation supplies	*North Derbyshire Water Board supplies*
pH value	8·5—9·4	7·5—8·1
Alkalinity ($CaCO_3$)	6—30 mg/litre	100—200 mg/litre
Hardness ($CaCO_3$)	39—84 mg/litre	100—400 mg/litre
Chloride (Cl)	15—31 mg/litre	18—115 mg/litre
Fluoride (F)	0·1 mg/litre	0·15—1·0 mg/litre

Information regarding bacteriological examination is as follows:—

Sheffield Corporation Sources of Samples	*Number examined*	*Number free from Coliforms*	*Number free from E.Coli Type I*
Raw waters	500	161 (32·2%)	201 (40·2%)
Waters entering supply	575	558 (97·0%)	573 (99·6%)
Consumers' taps	1,013	977 (96·6%)	1,009 (99·6%)

North Derbyshire Water Board

50 bacteriological samples of raw, final or distributed water were taken from the areas in question and all samples showed the absence of coliform organisms.

Other information supplied by each Undertaking is as follows:—

Sheffield Corporation

"The Undertaking exercises control over the entire watershed of its moorland water sources by prohibiting developments which might contaminate the reservoir feeders. It also provides a service to all properties in the areas concerned for the emptying of cesspools and the removal of night-soil.

During the year, 160 samples from consumers' taps were examined for lead; 157 of these were satisfactory (lead content less than 0·023 p.p.m.). Three samples contained 0·07, 0·09 and 0·10 p.p.m. but resamples were satisfactory".

North Derbyshire Water Board

"The treated waters in the area have given rise to no concern on the grounds of plumbo-solvency, and analyses on the supply water at source, in distribution and after overnight standing in lead service pipes, have yielded figures within the recently revised acceptable lead concentration.

Before being brought into service, all newly laid mains were washed out, sterilized and samples examined to ensure satisfactory bacteriological and physical results were obtained.

The waters were monitored to detect any excessive amounts of radioactive substances".

WATER POLLUTION CONTROL

By H. B. Tench, B.Sc., F.R.I.C., M.Inst., W.P.C.
General Manager, Water Pollution Control Department

"*If he fall in, good night*!"
William Shakespeare (Henry IV Part I)

Perhaps the most noteworthy event during the year was the municipal workers strike, as a result of which crude sewage was discharged untreated into the rivers during the period 9th to 20th October. Measures taken during the strike ensured that full purification would be resumed soon after its cessation. A satisfactory effluent was in fact discharged from the Blackburn Meadows Works some 24 hours after the resumption of work.

As can be seen from the table below, the standard of purification of the sewage discharged from the main works at Blackburn Meadows is generally satisfactory. However, the Bio-aeration Activated Sludge Plant is hydraulically incapable of treating the required three times dry weather flow and arrangements are in hand to improve the hydraulic characteristics of this plant. In addition the plant will not be capable of consistently satisfying the new River Authority standards of a biochemical oxygen demand not greater than 20 mg/litre and suspended solids not greater than 30 mg/l when these become operative on the 1st January 1971. Methods of improving the performance of the plant are being considered in conjunction with a scheme for the progressive extension of the whole works, as necessary, to deal with anticipated increases in sewage flow following enlargement of the capacity of the main drainage system and increases in water consumption. During the year temporary storm tanks were commissioned to enable the works to treat the sewage produced in periods of high rainfall. The quality of the water in the River Don tends to deteriorate in such periods and the operation of these tanks will materially assist in preventing this effect.

Average Effluent Quality, 1969 and 1970.

Works	*Average Daily Flow (m.g.d.)*		*Effluent Bio-Chemical Oxygen Demand (mg/l)*			*Effluent Suspended Solids (mg/l)*		
	1969	1970	*Maximum allowed by the River Authority*	1969	1970	*Maximum allowed by the River Authority*	1969	1970
Blackburn Meadows	37·2	36·5	30	14·0	17·8	40	21	25
Coisley Hill	1·3	1·3	20	19·4	12·7	30	17	13
Woodhouse Mill ...	0·9	0·8	20	11·7	19·0	30	11	25
Holbrook	1·0	0·8	20	11·2	13·4	30	21	26
Beighton	0·5	0·4	20	12·0	14·1	30	14	21

The six sewage works in the Rother Valley drainage area are reasonably satisfactory but the proposed development of this area will necessitate the closure of the Beighton Sewage Works and two small works at Hackenthorpe, and the enlargement of the Woodhouse Mill and Holbrook Sewage Works. Construction of the extension of the Holbrook Works commenced in December and is expected to be substantially completed in 1971. The design of the complete rebuilding and extension of the Woodhouse Mill Sewage Works is proceeding.

APPENDIX

VITAL STATISTICS

Population, Births and Deaths and Birth Rates and Death Rates in Sheffield and in England and Wales, in 1970, and previous years.

Year	Population (Estimated)	SHEFFIELD				ENGLAND AND WALES	
		Live Births		Deaths			
		Number of births	Birth Rate per 1,000 population	Number of deaths	Death Rate per 1,000 population	Birth Rate per 1,000 population	Death Rate per 1,000 population
1891 ...	... 325,547	11,862	36·4	7,775	23·9	31·4	20·2
1901 ...	... 410,151	12,766	33·0	7,891	20·4	28·5	16·9
1911 ...	... 455,817	12,623	27·7	7,335	16·1	24·4	14·6
1921 ...	... 519,239	11,907	23·8	6,284	12·5	22·4	12·1
1931 ...	... 517,300	7,777	15·0	5,839	11·3	15·8	12·3
1932 ...	... 513,000	7,393	14·4	5,976	11·6	15·3	12·0
1933 ...	... 511,820	7,178	14·0	6,117	12·0	14·4	12·3
1934 ...	... 520,950	7,530	14·5	5,886	11·4	14·8	11·8
1935 ...	... 520,500	7,676	14·7	6,193	11·9	14·7	11·7
1936 ...	... 518,200	7,884	15·2	6,334	12·2	14·8	12·1
1937 ...	... 518,200	7,962	15·4	6,492	12·5	14·9	12·4
1938 ...	... 520,000	8,144	15·7	5,906	11·4	15·1	11·6
1939 ...	... 522,000	8,192	15·7	6,201	12·0	15·0	12·1
1940 ...	... 496,700	7,702	15·5	7,538	15·2	15·2	14·4
1941 ...	... 483,320	7,477	15·5	6,583	13·6	14·9	13·5
1942 ...	... 479,400	7,958	16·6	5,697	11·9	15·8	12·3
1943 ...	... 474,100	8,613	18·2	6,215	13·1	16·5	13·0
1944 ...	... 474,180	10,072	21·2	5,905	12·5	17·6	12·7
1945 ...	... 476,360	8,629	18·1	5,968	12·5	17·8	12·6
1946 ...	... 500,400	10,073	20·1	6,167	12·3	19·1	12·0
1947 ...	... 508,370	10,522	20·7	6,260	12·3	20·6	12·0
1948 ...	... 514,400	9,107	17·7	5,797	11·3	17·9	10·8
1949 ...	... 513,700	8,087	15·7	6,431	12·5	16·7	11·7
1950 ...	... 515,000	7,370	14·3	5,883	11·4	15·8	11·6
1951 ...	... 510,000	7,233	14·2	6,633	13·0	15·5	12·5
1952 ...	... 510,900	7,005	13·7	5,937	11·6	15·3	11·3
1953 ...	... 507,600	7,055	13·9	6,041	11·9	15·5	11·4
1954 ...	... 503,400	6,867	13·6	5,821	11·6	15·2	11·3
1955 ...	... 501,100	6,756	13·5	5,934	11·8	15·0	11·7
1956 ...	... 499,000	7,040	14·1	5,852	11·7	15·7	11·7
1957 ...	... 498,500	7,519	15·1	5,785	11·6	16·1	11·5
1958 ...	... 498,800	7,656	15·3	5,865	11·8	16·4	11·7
1959 ...	... 499,400	7,709	15·4	5,860	11·7	16·5	11·6
1960 ...	... 499,610	7,829	15·7	5,810	11·6	17·1	11·5
1961 ...	... 494,650	8,157	16·5	6,477	13·1	17·4	12·0
1962 ...	... 495,240	8,612	17·4	6,282	12·7	18·0	11·9
1963 ...	... 495,290	8,396	17·0	6,256	12·6	18·2	12·2
1964 ...	... 490,930	8,400	17·1	6,015	12·3	18·4	11·3
1965 ...	... 488,950	8,505	17·4	5,929	12·1	17·4	12·1
1966 ...	... 486,490	8,291	17·0	6,170	12·7	17·7	11·7
1967 ...	... 534,100	8,876	17·0	5,968	11·4	17·2	11·2
1968 ...	... 531,800	8,874	16·7	6,669	12·5	16·9	11·9
1969 ...	... 528,860	8,465	16·0	6,666	12·6	16·3	11·9
1970 ...	... 525,230	8,214	15·6	6,466	12·3	16·0	11·7

Population at earlier dates:—14,105 in 1736; 53,231 in 1811; 65,275 in 1821; 91,692 in 1831; 111,091 in 1841; 135,310 in 1851; 186,375 in 1861; 241,506 in 1871; 284,508 in 1881.

The City was extended on 31st October, 1901; 1st April, 1912; 1st October, 1914; 9th November, 1921; 1st April, 1929; 1st April, 1934 and 1st April, 1967.

Deaths of Sheffield Residents in the year 1970
Classified according to Disease, Sex and Age-Periods

Cause of Death	*Sex*	*All Ages*	0—	1—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M	3,381	104	8	11	30	110	950	1,084	1,084
	F	3,085	57	6	6	17	54	566	748	1,631
TOTALS		6,466	161	14	17	47	164	1,516	1,832	2,715
Enteritis and other diarrhoeal	M	6	5	1	—	—	—	—	—	—
diseases	F	7	4	2	—	—	—	—	—	1
Tuberculosis of respiratory system ...	M	7	—	—	—	—	1	2	3	1
	F	1	—	—	—	—	—	1	—	—
Late effects of respiratory	M	3	—	—	—	—	—	2	1	—
tuberculosis	F	2	—	—	—	—	—	—	2	—
Other tuberculosis	M	4	—	—	—	—	1	—	3	—
	F	2	—	—	1	—	—	—	1	—
Measles	M	1	1	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—
Syphilis and its sequelae	M	3	—	—	—	—	—	1	2	—
	F	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases	M	7	3	—	—	1	—	2	—	1
	F	10	3	—	1	1	—	3	2	—
Malignant neoplasm, buccal cavity.	M	9	—	—	—	—	—	2	3	4
etc.	F	4	—	—	—	1	—	2	1	—
Malignant neoplasm, oesophagus ...	M	7	—	—	—	—	—	1	4	2
	F	10	—	—	—	—	1	2	2	5
Malignant neoplasm, stomach ...	M	89	—	—	—	—	—	36	33	20
	F	67	—	—	—	—	2	20	22	23
Malignant neoplasm, intestine ...	M	102	—	—	—	—	4	26	44	28
	F	105	—	—	—	—	—	26	30	49
Malignant neoplasm, larynx ...	M	5	—	—	—	—	—	3	2	—
	F	2	—	—	—	—	—	2	—	—
Malignant neoplasm, lung, bronchus	M	365	—	—	—	—	5	162	146	52
	F	64	—	—	—	—	2	33	16	13
Malignant neoplasm, breast ...	M	—	—	—	—	—	—	—	—	—
	F	118	—	—	—	—	5	60	32	21
Malignant neoplasm, uterus ...	F	37	—	—	—	—	2	17	11	7
Malignant neoplasm, prostate ...	M	47	—	—	—	—	—	5	20	22
Leukaemia	M	22	—	—	1	2	4	4	4	7
	F	6	—	—	—	—	—	3	2	1
Other malignant neoplasms ...	M	153	1	—	2	1	11	56	47	35
	F	156	—	—	—	4	5	62	39	46
Benign and unspecified neoplasms	M	4	—	—	—	2	—	1	1	—
	F	7	—	—	—	—	—	3	2	2
Diabetes mellitus	M	21	—	—	—	—	—	3	7	11
	F	42	—	1	—	—	—	12	13	16
Avitaminoses, etc.	M	2	—	—	—	—	—	1	—	1
	F	1	—	—	—	—	—	—	1	—
Other endocrine etc. diseases ...	M	6	—	—	1	—	—	4	1	—
	F	6	—	—	1	1	—	1	3	—
Anaemias	M	4	—	—	—	—	—	—	3	1
	F	3	—	—	—	—	—	—	1	2
Other diseses of blood, etc. ...	M	1	1	—	—	—	—	—	—	—
	F	1	—	—	—	—	—	—	1	—
Mental disorders	M	1	—	—	—	—	—	—	1	—
	F	4	—	—	—	—	—	—	—	4
Meningitis	M	2	—	—	—	—	1	—	1	—
	F	—	—	—	—	—	—	—	—	—
Multiple sclerosis	M	3	—	—	—	—	—	3	—	—
	F	6	—	—	—	—	2	2	2	—
Other diseases of nervous system ...	M	26	2	2	—	—	4	3	4	11
	F	31	1	2	1	1	1	6	7	12
Chronic rheumatic heart disease ...	M	54	—	—	—	—	3	26	14	11
	F	86	—	—	—	—	3	32	31	20
Hypertensive disease	M	33	—	—	—	—	—	13	8	12
	F	52	—	—	—	—	2	4	14	32
Ischaemic heart disease	M	924	—	—	—	—	23	301	325	275
	F	666	—	—	—	—	1	90	211	364
Other forms of heart disease ...	M	96	—	—	—	1	—	18	18	59
	F	143	—	—	—	—	—	10	29	104
Cerebrovascular disease	M	322	—	—	—	—	5	65	98	154
	F	502	—	—	—	1	5	62	104	330
Other diseases of circulatory system	M	203	—	—	—	—	2	27	54	120
	F	291	—	—	—	—	2	12	50	227
Influenza	M	38	—	—	—	—	1	13	15	9
	F	25	—	—	—	—	2	5	11	7
Pneumonia	M	160	4	1	1	1	3	32	41	77
	F	224	3	—	2	1	—	17	37	164
Bronchitis and emphysema	M	280	—	—	—	—	—	60	119	101
	F	78	1	—	—	—	2	20	13	42
Asthma	M	3	—	—	—	1	—	1	—	1
	F	16	—	1	—	—	4	6	1	4
Other diseases of respiratory system	M	35	13	—	—	2	—	2	10	8
	F	29	5	—	—	2	1	5	3	13
Peptic ulcer	M	34	—	—	—	—	2	11	8	13
	F	18	—	—	—	—	1	6	4	7
Appendicitis	M	1	—	—	—	—	—	—	1	—
	F	1	—	—	—	—	—	—	—	1
Intestinal obstruction and hernia ...	M	21	2	—	—	—	1	6	3	9
	F	14	1	—	—	—	1	—	1	11

Cause of Death	*Sex*	*All Ages*	0—	1—	5—	15—	25—	45—	65—	75—
Cirrhosis of liver	M	8	—	—	—	—	1	4	2	1
	F	12	—	—	—	—	2	3	2	5
Other diseases of digestive system ...	M	28	—	—	—	—	5	9	9	5
	F	36	—	—	—	—	—	8	13	15
Nephritis and nephrosis	M	16	—	1	—	1	5	4	3	2
	F	9	—	—	—	—	1	4	3	1
Hyperplasia of prostate	M	6	—	—	—	—	—	1	3	2
Other diseases, genito-urinary system	M	7	—	—	—	—	—	—	2	5
	F	27	—	—	—	—	2	4	8	13
Diseases of skin, subcutaneous tissue	M	1	—	—	—	—	1	—	—	—
	F	2	1	—	—	—	—	—	—	1
Diseases of musculo-skeletal system	M	8	—	—	—	1	1	—	2	4
	F	20	—	—	—	—	1	5	5	9
Congenital anomalies	M	27	18	2	1	—	3	2	—	1
	F	22	17	—	—	—	—	4	1	—
Birth injury, difficult labour, etc. ...	M	36	36	—	—	—	—	—	—	—
	F	12	12	—	—	—	—	—	—	—
Other causes of perinatal mortality	M	14	14	—	—	—	—	—	—	—
	F	7	7	—	—	—	—	—	—	—
Symptoms and ill defined conditions	M	4	1	—	—	—	—	1	1	1
	F	14	2	—	—	—	—	—	1	11
Motor vehicle accidents	M	38	—	—	3	10	9	8	7	1
	F	19	—	—	—	3	—	5	3	8
All other accidents	M	48	1	—	2	3	6	14	7	15
	F	44	—	—	—	—	—	1	9	34
Suicide and self-inflicted injuries ...	M	19	—	—	—	2	5	7	4	1
	F	12	—	—	—	2	1	5	2	2
All other external causes	M	17	2	1	—	2	3	8	—	1
	F	12	—	—	—	—	3	3	2	4

Health Visiting

Summary of Visits of Health Visitors during the year 1970

	Number of Visits	
Infants born in 1970—first visits	8,700	
—subsequent visits	9,383	
		18,083
Infants born between 1965—1969		39,699
Scabies		472
Whooping cough		585
Measles		1,009
Scarlet fever		187
Meningitis		48
Diphtheria		1
Venereal disease		614
Leprosy		3
Other infectious diseases		15
Ex-hospital cases *re* after-care		1,423
Expectant mothers—first visits	1,233	
—subsequent visits	395	
		1,628
Postnatal cases		8,504
Tuberculosis—pulmonary	1,109	
—non-pulmonary	161	
		1,270
Tuberculosis contacts		619
Follow-up of positive reactors		164
B.C.G.		239
Persons aged 65 or over		16,258
Chiropody applicants		1,166
Meals on Wheels applicants		1,157
Mentally disordered persons		700
Phenylketonuria tests		1,577
Hearing tests		2,789
Congenital abnormalities		47
Nursing homes		19
Child-minders		834
Mother and baby homes		32
Day nurseries		66
Hospital medical social workers		222
Chest clinic		78
Medical practitioners		700
Investigation of infant deaths		67
Investigation of stillbirths		98
Home conditions		246
Handicapped persons		2,832
Problem families		1,910
Accidents in the home		63
Care of immigrant children		1,509
Vision tests		62
Immunisation and vaccination visits		556
Problem family survey		33
Domiciliary visits with geriatrician		203
Day nursery applicants and Reports		180
Other reasons		2,157
TOTAL		110,124

In addition, the health visitors made 8,106 attendances at clinic sessions, 492 attendances at hospital sessions, and paid 17,263 ineffectual visits during the year.

Premature Babies born alive to Sheffield Residents during the year 1970,

	3 lbs. 4 ozs. or less	Over 3 lbs. 4 ozs. to 4 lbs. 6 ozs.	Over 4 lbs. 6 ozs. to 4 lbs. 15 ozs.	Over 4 lbs. 15 ozs. to 5 lbs. 8 ozs.	Not weighed	Total
Born at home	3	8	8	20	—	39
Born in hospital or nursing home	49	107	153	255	3	567
Grand total—premature babies	52	115	161	275	3	606
Died in first 24 hours						
Born at home	1	—	2	—	—	3
Born in hospital or nursing home ...	21	13	3	4	1	42
	22	13	5	4	1	45
Died on 2nd to 7th day						
Born at home	1	—	1	—	—	2
Born in hospital or nursing home ...	6	6	2	2	1	17
	7	6	3	2	1	19
Died on 8th to 28th day						
Born at home	—	—	—	—	—	—
Born in hospital or nursing home ...	1	1	1	—	—	3
	1	1	1	—	—	3
Total who died during first 28 days						
Born at home	2	—	3	—	—	5
Born in hospital or nursing home ...	28	20	6	6	2	62
	30	20	9	6	2	67
Total who survived 28 days						
Born at home	1	8	5	20	—	34
Born in hospital or nursing home ...	21	87	147	249	1	505
	22	95	152	269	1	539

Percentage of those born at home who died during the first 28 days ...	66·67	—	37·5	—	—	12·82
Percentage of those born in hospital or nursing home who died during the first 28 days	57·4	18·69	3·92	2·35	66·67	10·93
Percentage of all premature babies who died during the first 28 days ...	57·69	17·39	5·59	2·18	66·67	11·6

Total live births to Sheffield residents notified during 1970 8,261	*Number of Premature Births* 606	*Percentage of Premature Births to Total Live Births* 7·34
Total stillbirths to Sheffield residents notified during 1970 102	*Number of Premature Births* 606	*Percentage of Total Stillbirths to Premature Births* 16·83

52 (0·63) of all live births weighed 3 lbs. 4 ozs. or less

115 (1·39) of all live births weighed over 3 lbs. 4 ozs. up to and including 4 lbs. 6 ozs.

161 (1·95) of all live births weighed over 4 lbs. 6 ozs. up to and including 4 lbs. 15 ozs.

275 (3·33) of all live births weighed over 4 lbs. 15 ozs. up to and including 5 lbs. 8 ozs.

PERSONAL HEALTH SERVICES

Care of Mothers and Young Children

Register of Congenital Abnormalities.—The following cases have been added of babies born in 1970. Stillbirths are included so as to give a more complete picture of the incidence of congenital malformations.

Abnormality		*Total*
Alimentary Tract		13
Hare lip and cleft palate	6	
Cleft palate alone	2	
Atresias	3	
Ectopic anus	1	
Hirschsprung's disease	1	
Bone and Joint		77
Congenital dislocation of hips —definite	23	
Congenital dislocation of hips —still queried	4	
Talipes —structural	13	
Talipes —postural	20	
Supernumerary digits	10	
Syndactyly	2	
Reduction deformities limbs	2	
Miscellaneous	3	
Genito-Urinary		27
Renal agenesis	1	
Renal hypoplasia	1	
Ectopic vesicae	1	
Multiple urinary tract abnormalities	1	
Vaginal polyps	3	
Varieties of hypospadias	18	
Abnormal external genitalia	2	
Heart		35
Septal defects	10	
Patent ductus	2	
Coarctation aorta	1	
Truncus arteriosus	1	
Totally anomalous venous return	1	
Multiple defects	7	
Definite defect but unspecified	3	
Under observation	10	
Central Nervous System		35
Spina bifida cystica	16	
Hydrocephalus alone	2	
Sacral sinus	4	
Anencephalus	8	
Microcephalus	3	
Occipital dermal sinus	1	
Trigonocephaly	1	
Multiple and Special Syndromes		36
Mongolism alone	6	
—with other defects	6	
Trisomy 17/18	1	
Multiple defects	7	
Pierre Robin syndrome	3	
Klippel-Feil syndrome	1	
First arch syndrome	2	
Thyroid deficiency	2	
Phenylketonuria	1	
Incontinence pigmenti	1	
Possible chromosomal abnormality	6	

Abnormality		*Total*
Miscellaneous		34
Naevi	6	
Cystic hygroma	1	
Dermoid cyst	1	
Branchial sinus	1	
Malformed ears	2	
Accessory auricles	5	
Eyes—absence	1	
—enophthalmos	1	
—cataracts	2	
Exomphalos	1	
Coccygeal sinus	7	
Minor	6	
All conditions		257

'At Risk' Register.—The following cases have been added of children born in 1970; these are in addition to any named on the register of congenital abnormalities:—

Family History		12
Deafness	4	
Metabolic disorders	2	
Blood disorders	4	
Miscellaneous	2	
Prenatal		95
Maternal diabetes	12	
Maternal epilepsy	5	
Maternal positive W.R.	3	
Miscellaneous maternal conditions	10	
Blood incompatability		
Rhesus factor—severely affected	26	
—mildly affected	27	
ABO factor—severely affected	2	
—mildly affected	8	
Other—severely affected	1	
—mildly affected	1	
Perinatal		333
Premature babies of 4 lbs. 6 oz. (1·984 kgms.) and under excluding 66 in other categories	51	
Dysmature babies	45	
Severe difficulties in delivery and resuscitation	131	
Severe degree of jaundice (excluding blood incompatabilities)	34	
Multiple births 5 lbs. 8 oz (2·495 kgms) and under	72	
Post-natal		8
Infection	3	
Miscellaneous	5	
Babies with 2 'at risk' factors		27
Babies with 3 or more 'at risk' factors		5
TOTAL		480

Midwifery

Hospital Discharges Visited by the Domiciliary Midwives during 1970

No. of Days	*1st day*	*2nd day*	*3rd day*	*4th day*	*5th day*	*6th day*	*7th day*	*8th day plus*
Northern General Hospital Emergency cases previously transferred from the district	3	30	6	3	1	—	—	—
Booked for early discharge for reason of medical or obstetrical abnormality ...	1	384	126	23	2	—	—	—
Unplanned discharges (e.g. by own discharge, stillbirth, neonatal death, or due to bed shortage)	6	56	55	52	78	308	1,056	105
Jessop Hospital Emergency cases previously transferred from the district	4	67	9	1	1	—	—	—
Booked for early discharge for reason of medical or obstetrical abnormality ...	—	290	40	3	1	—	—	—
Unplanned discharges (e.g. by own discharge, stillbirth, neonatal death, or due to bed shortage	4	52	35	44	175	438	88	58
Nether Edge Hospital Emergency cases previously transferred from the district	—	12	4	3	—	—	—	—
Booked for early discharge for reason of medical or obstetrical abnormality ...	2	221	75	8	1	—	—	—
Unplanned discharges (e.g. by own discharge, stillbirth, neonatal death, or due to bed shortage	—	37	50	63	94	283	978	228
Miscellaneous unplanned discharges (e.g. by own discharge, stillbirth, neonatal death, or due to bed shortage)	—	6	12	3	2	5	13	54
TOTALS	20	1,155	412	203	355	1,034	2,135	445

Smallpox Vaccinations.—Number of persons vaccinated:—

PRIMARY VACCINATIONS

Year	*Under 1 year*	*1—4 years*	*5—14 years*	*15 years and over*	*Total*
1966	133	3,762	189	332	4,416
1967	114	4,144	139	417	4,814
1968	105	4,100	153	516	4,874
1969	70	3,098	156	483	3,807
1970	60	2,400	207	625	3,292

RE-VACCINATIONS

1966	—	35	236	843	1,114
1967	—	53	166	1,058	1,257
1968	—	35	166	1,647	1,848
1969	—	55	794	1,714	2,563
1970	—	56	1,211	1,960	3,227

The primary vaccinations and re-vaccinations during 1970 were carried out as follows:—

	Primary Vaccinations	*Re-vaccinations*
By general practitioners	2,527	2,228
At maternity and child welfare centres	757	44
At school health centres...	—	929
At hospitals	4	1
At occupational health service	4	25
TOTALS	3,292	3,227

Diphtheria Immunisation.—Number of persons *fully* immunised:—

Year	*Under 1 year*	*1—4 years*	*5—14 years*	*15 years and over*	*Total*
1966	3,321	3,435	596	1	7,353
1967	3,819	3,514	504	2	7,839
1968	3,298	3,806	370	5	7,479
1969	607	3,187	356	10	4,160
1970	602	5,771	225	1	6,599

Poliomyelitis Immunisation.—Number of persons who received *completed courses* of oral (Sabin) Poliomyelitis vaccine:—

Age Group	1968	1969	1970
0—4	7,281	3,686	6,110
5—14	479	157	398
15 and over ...	75	296	180
Doses	5,979	8,851	7,919

Total number of persons who have received poliomyelitis vaccine since 1956:—

Primary course	284,527
Re-inforcing doses	264,562

Tuberculosis Control

Notification by Age and Sex

(Immigrants are shown in brackets)

Age	Males			Females			Males and Females		
	Pulmonary	*Other Forms*	*All Forms*	*Pulmonary*	*Other Forms*	*All Forms*	*Pulmonary*	*Other Forms*	*All Forms*
Under 1 ...	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—
2— 4	—	1	1	1 (1)	2 (1)	3 (2)	1 (1)	3 (1)	4 (2)
5— 9	—	—	—	1	—	1	1	—	1
10—14	—	3 (2)	3 (2)	—	1	1	—	4 (2)	4 (2)
15—19	2	1 (1)	3 (1)	—	—	—	2	1 (1)	3 (1)
20—24	2 (2)	3 (2)	5 (4)	8 (2)	3 (1)	11 (3)	10 (4)	6 (3)	16 (7)
25—34	6 (4)	4 (4)	10 (8)	5 (1)	5 (2)	10 (3)	11 (5)	9 (6)	20 (11)
35—44	10 (4)	1	11 (4)	9 (3)	4 (3)	13 (6)	19 (7)	5 (3)	24 (10)
45—54	12 (2)	—	12 (2)	1	—	2	13 (2)	—	13 (2)
55—64	12	3	15	4	1	5	16	4	20
65—74	15	3	18	—	5	5	15	8	23
74+	6	—	6	3	—	3	9	—	9
TOTALS ...	65 (12)	19 (9)	84 (21)	32 (7)	21 (7)	53 (14)	97 (19)	40 (16)	137 (35)

Notifications in Immigrants

Country of Origin	*Pulmonary*	*Other Forms*	*All Forms*
Commonwealth Countries			
Pakistan	13	9	22
Carribean	3	1	4
Nepalese	—	1	1
African	1	1	2
Non-Commonwealth			
European	1	—	1
Others	1	4	5
TOTALS	19	16	35

Follow-up of contacts of positive reactors:—

X-ray of older contacts

Had recent chest X-ray 1970	70
Had B.C.G. at school	14
Number X-rayed	78
Already under supervision	8

Results of X-ray examination

No abnormality found	76
Signs of past tuberculosis now healed	1
Enlarged heart	1

Tuberculin tests of younger siblings

Number tested	98
Already had B.C.G.	8
Negative reactors	54
Number vaccinated	18
Positive reactors:—	
—normal X-ray	16
—healed tuberculous lesion	1
Positive reactor rate	25%

Younger siblings given B.C.G. (0-5 yrs.)

Chest clinic	970
Jessop Hospital	130
Children's Hospital	2
TOTAL	1,102

Home Help and Home Warden Service

Cases Where Home Help was Provided

(*a*)	Number receiving assistance at 1.1.70	4,305
(*b*)	Number of new cases during 1970	2,080
(*c*)	Number ceasing to require assistance during 1970	1,765
(*d*)	Number receiving assistance at 31.12.70	4,620

Types of Cases

	Group	*No. of Cases* Old	New	*Help given in Hours* Daily Service	Evening Service	Night Service
(*a*)	Maternity	6	150	6,412	—	—
(*b*)	Old age	4,008	1,642	839,432	—	—
(*c*)	Long term illness	225	103	52,838	—	—
(*d*)	Short term illness	40	163	10,176	—	—
(*e*)	Care of children	3	11	2,138	—	—
(*f*)	Tuberculosis	21	7	3,978	—	—
(*g*)	Problem families	2	4	339	—	—
	Totals	4,305	2,080	915,313	—	—

Home Helps

		No. of Hours
(*a*)	Travelling	2,770 hrs.
(*b*)	Training and meetings	3,992 hrs.
(*c*)	X-rays and vaccinations	380 hrs.
(*e*)	Washing at training centre	2,429 hrs.

Visits by Home Help Organisers

(*a*)	New Enquiries: (i) Maternity	206
	(ii) Others	3,109
(*b*)	Existing Cases	5,220
(*c*)	Helps or Wardens seen at Work	6,120
(*d*)	Helps or Wardens seen at Home	778
(*e*)	Miscellaneous	483
	Total	15,916
	Ineffective	1,165

Home Helps

		Full-time	*Part-time*	*Total*
(*a*)	Number of staff at 1.1.70	81	700	781
(*b*)	Number commenced duty during 1970	58	318	376
(*c*)	Number left service during 1970	46	307	353
(*d*)	Number of staff at 31.12.70	93	712	804
(*e*)	Equivalent days (periods of 8 hours) absence due to:—			
	(i) Sickness	2,169	10,287	12,456
	(ii) Leave	1,261	5,857	7,118

Home Wardens

			No. of Visits
(*a*)	Number employed at 31.12.70	63 + 1 P.T.	
(*b*)	No. of patients that received H.H. and H.W. service	1,039	21,652
(*c*)	No. of patients that received H.W. service only	132	1,854

Home Help and Home Warden Service

Summary of Maternity Cases

	Cases Visited and Served						*Cases Visited but not Served*			
	No. of Full-time cases served	*No. of Part-time cases served where other help available*	*48 hour delivery in hospital*		*Ante-natal and Post-natal cases served*		*No. of Cases booked but appointment cancelled owing to confinement in hospital for full period*	*No. of Cases booked but finally withdrawn because private arrangements made*	*Total Cases Visited* 1970	*Total Cases Actually Served*
			F.T.	*P.T.*	*F.T.*	*P.T.*				
JANUARY	4	14	1	4	—	1	4	10	24	24
FEBRUARY	1	7	2	3	—	1	2	4	20	14
MARCH	—	10	3	5	—	1	—	5	16	19
APRIL	1	4	1	4	—	1	1	8	25	11
MAY	1	5	—	2	—	2	4	4	9	10
JUNE	—	4	—	3	1	3	—	7	25	11
JULY	1	2	—	—	—	1	1	5	9	4
AUGUST	2	2	—	5	—	—	2	9	9	9
SEPTEMBER	4	6	—	6	—	2	2	4	18	18
OCTOBER	—	3	—	3	—	—	1	4	8	6
NOVEMBER	2	4	5	7	—	1	1	2	7	19
DECEMBER	2	4	1	2	—	2	1	7	8	11
TOTAL	18	65	13	44	1	15	19	69	178	156

WELFARE SERVICES

Welfare of Blind and Partially-Sighted

Classification of Registered Blind Persons by Age Groups

Age Group	*Total Register (Age at Dec. 31st 1970)*			*New Cases Registered during 1970 (Age at Registration)*		
	M.	*F.*	*Total*	*M.*	*F.*	*Total*
0	1	—	1	1	—	1
1	1	—	1	1	—	1
2	—	1	1	—	—	—
3	—	1	1	—	—	—
4	—	—	—	—	—	—
5—10	7	6	13	1	—	1
11—15	6	8	14	—	1	1
16—20	7	6	13	—	—	—
21—29	16	13	29	—	—	—
30—39	22	16	38	1	2	3
40—49	34	26	60	2	3	5
50—59	56	47	103	2	1	3
60—64	39	43	82	4	3	7
65—69	52	58	110	8	3	11
70—79	97	163	260	4	21	25
80—84	52	95	147	5	14	19
85—89	28	107	135	3	8	21
90 and over ...	21	55	76	3	6	9
Unknown ...	—	1	1	—	—	—
TOTALS	439	646	1,085	35	72	107

Blind Persons Age 16 and Upwards Resident in Hospitals

	M.	*F.*	*Total*
Hospitals for mentally ill	6	13	19
Hospitals for mentally handicapped	6	5	11
Other hospitals	6	19	25
TOTALS	18	37	55

Table Showing Age Groups of Blind Persons on Sheffield Register

	0	1	2	3	4	5-10	11-15	16-20	21-29	30-39	40-49	50-59	60-64	65-69	70-79	80-84	85-89	90 & over	*Un-known*	*Total*
1960	—	—	1	1	2	19	14	7	24	43	81	117	76	81	230	159	93	29	4	981
1961	—	1	3	1	1	19	15	8	23	40	76	112	77	91	227	149	98	31	3	975
1962	—	—	1	2	1	15	17	12	22	41	69	113	70	98	233	139	103	33	3	972
1963	—	1	1	2	2	17	16	11	25	28	78	112	79	91	248	134	101	32	3	981
1964	—	1	2	2	2	17	12	15	22	32	72	105	93	90	245	137	120	45	3	1,015
1965	—	—	1	2	3	14	16	14	19	29	67	116	87	93	246	124	121	48	2	1,002
1966	—	—	—	1	2	17	13	15	19	30	59	111	94	89	252	130	122	42	1	997
1967	—	—	1	—	1	17	13	16	28	27	59	123	95	101	283	136	115	52	1	1,068
1968	—	1	—	1	—	14	14	15	27	35	63	116	94	105	267	140	114	52	1	1,059
1969	—	1	1	—	2	13	12	12	31	39	57	114	83	114	281	136	133	65	1	1,095
1970	1	1	1	1	—	13	14	13	29	38	60	103	82	110	260	147	135	76	1	1,085

Distribution of Local Blind Persons

Children, age under 16

		M.	F.	Total	M.	F.	Total
Under 2 ...	At home	2	—	2			
					2	—	2
Age 2—4 ...	*Educable:*—						
	At home	—	2	2			
					—	2	2
Age 5—15...	*Educable:*—						
	Attending school ...	6	8	14			
	Unsuitable for school:—						
	In hospital for mentally handicapped	4	1	5			
	At home	3	5	8			
					13	14	27
					15	16	31

Training and Employment

Age periods 16 years and upwards

	M.	F.	Total	M.	F.	Total
Employed						
(*a*) *In workshops for the blind*						
16—20	1	—	1			
21—39	4	—	4			
40—49	8	1	9			
50—59	13	3	16			
60—64	5	—	5			
65 and over	1	—	1			
				32	4	36
(*b*) As Approved Home Workers						
60—64	1	—	1			
				1	—	1
(*c*) All others						
16—20	—	—	—			
21—39	16	2	18			
40—49	10	1	11			
50—59	15	3	18			
60—64	5	—	5			
65 and over	2	—	2			
				48	6	54
				81	10	91
Undergoing Training						
(*a*) For open employment ...	1	—	1			
(*b*) Professional	1	—	1			
				2	—	2
Not employed				339	618	957
			Totals	422	628	1,050

Register of Partially-Sighted Persons

Age Group	0—1		2—4		5—15		16—20		21—49		50—64		65 *and over*		*All ages*		*Total both sexes*
Year	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	
1959	—	—	1	2	13	14	7	7	8	7	9	11	48	78	86	119	205
1960	—	—	1	2	12	12	8	8	6	7	10	11	41	68	78	108	186
1961	—	—	1	1	11	9	7	8	8	6	11	10	37	64	75	98	173
1962	—	—	—	—	11	10	7	7	9	8	11	9	37	80	75	114	189
1963	—	—	—	1	15	10	4	5	13	10	13	8	35	97	80	131	211
1964	—	—	—	1	11	8	6	5	13	13	15	11	40	107	85	145	230
1965	—	—	1	2	13	7	4	6	18	16	13	17	41	123	90	171	261
1966	—	—	—	2	13	8	5	5	17	16	18	19	54	149	107	199	306
1967	—	—	1	1	13	5	9	8	19	20	19	20	62	183	123	237	360
1968	—	—	—	1	15	6	10	6	23	25	22	17	74	198	144	253	397
1969	—	—	—	—	16	7	7	6	31	28	21	20	72	215	147	276	423
1970	—	—	1	1	15	5	9	7	32	25	21	20	75	230	153	288	441

Welfare of Handicapped Persons (General Classes)

Registration: The number on the register is 4,623

Classification of disability is as follows:—

Amputation of limb	160
Arthritis and muscular rheumatism (including fibrositis)	1,553
Congenital malformation and skeletal deformities	201
Diabetes	45
Diseases of the digestive system	90
Diseases of the genito-urinary system	29
Diseases of the heart and circulatory system	585
Diseases of the respiratory system	272
Epilepsy	123
Injury and diseases of bones and joints	446
Mental subnormality	18
Muscular dystrophy	25
Neoplasm	17
Organic nervous diseases	721
Psychoses, psychoneurosis	69
Poliomyelitis	96
Tuberculosis—respiratory	48
Tuberculosis—spine, bones, joints, etc.	32
Miscellaneous	93
Total	4,623

AGE GROUPS (General Classes)

	Under 16 years	16—29 *years*	30—49 *years*	50—64 *years*	65 *and over*	*Totals*
Males	41	98	246	633	766	1,784
Females	22	87	177	602	1,951	2,839
Totals ...	63	185	423	1,235	2,717	4,623

The employment or occupation of persons on the register was as follows:

(i) Employed in open industry	117
(ii) At Remploy or sheltered workshop	14
(iii) Employed at home	4
(iv) Not employed but capable of and available for:—	
(*a*) Open employment	165
(*b*) Sheltered employment	147
(*c*) Handicrafts	404
(v) Incapable of or not available for work	3,709
(vi) Children of school age	38
(vii) Children under school age	25
TOTAL	4,623

ENVIRONMENTAL SERVICES

General Public Health Inspection

SUMMARY OF WORK DONE BY THE PUBLIC HEALTH INSPECTORS DURING THE YEAR 1970

1.	NUISANCES	
(*a*)	No. of premises found affected	7,002
(*b*)	No. of initial visits	7,604
(*c*)	No. of re-inspections	6,886
(*d*)	No. of houses where nuisances abated	2,426
(*e*)	No. of informal notices	3,357
(*f*)	No. of statutory notices	1,239
(*g*)	Noise nuisances—No. of visits	121
2.	DRAINAGE AND BUILDING WORKS	
	No. of inspections	9,712
3.	HOUSING	
(*a*)	No. of inspections	2,631
(*b*)	Qualification Certificates—visits	1,330
(*c*)	Improvement Grants—visits	8,806
(*d*)	Overcrowding—visits	74
(*e*)	Rent Acts—visits	2
(*f*)	Loans on mortgage—visits *re* applications for	934
(*g*)	Houses in multiple occupation—total visits	1,609
	—where Commonwealth immigrants are residents	278
(*h*)	Common lodging houses—visits	34
(*i*)	Medical priority rehousing—visits	1,721
4.	FOOD PREMISES—No. of visits to:—	
(*a*)	Dairies	72
(*b*)	Catering premises	540
(*c*)	Food saleshops and warehouses	2,306
(*d*)	Market stalls and food vehicles	138
(*e*)	Other food preparation premises	619
(*f*)	Licensed premises and clubs	422
5.	FOOD POISONING	
(*a*)	No. of visits	503
(*b*)	No. of food specimens taken	4
6.	INFECTIOUS DISEASES—No. of visits	2,623
7.	OFFENSIVE TRADES—No. of visits	29
8.	RAG FLOCK AND OTHER FILLING MATERIALS ACT—No. of visits	11
9.	DEPOSITED PLANS—No. examined	4,589
10.	DISINFESTATION—No. of visits to:—	
(*a*)	Private houses	4,246
(*b*)	Corporation houses	1,730
(*c*)	Other premises	145
11.	PEST CONTROL—No. of visits	215
12.	DISEASES OF ANIMALS ACT—No. of visits	132
13.	PET SHOPS—No. of visits	62
14.	ANIMAL BOARDING ESTABLISHMENTS—No. of visits	34
15.	RIDING ESTABLISHMENTS ACTS 1964-70—No. of visits	14
16.	WATER SUPPLIES OTHER THAN MAINS SUPPLIES	7
17.	BATHING POOLS	
(*a*)	No. of visits	56
(*b*)	No. of water samples to Public Health Laboratory	39
(*c*)	No. of Orthotolidine Tests	48

18.	Caravan Sites—No. of visits	56
19.	Attendances at Court—No. of	21
20.	Prosecutions Taken—No. of	24
21.	Miscellaneous Letters—No. of	14,512
22.	Miscellaneous Visits—No. of	9,085
23.	Nursery and Child-Minders' Premises—No. of visits	155
24.	Town Planning Applications	107
25.	Town Clerk's Property Enquiries Dealt With	8,496
26.	Public Health Act 1936—Section 23	
(*a*)	Public sewers cleansed	412
(*b*)	Houses affected	1,418

Defects remedied as a result of informal and statutory notices:—

Public Health Act 1936		
Section 24.	Public sewers	6
Section 39.	Cesspools	—
	Private sewers	8
	Drains	346
	Soilpipes	6
	Rainwater pipes	92
	Eaves spouts	417
	Sinks	44
	Sinkwaste pipes	90
Section 45.	Repair to waterclosets	309
Section 56.	Paving	112
Section 83.	Filthy and verminous premises	82
Section 84.	Filthy and verminous articles in premises	10
Section 93.	Absence of water supply (disrepair)	40
	Roofs	680
	Chimneys and flues	103
	Doors	90
	Windows	298
	Floors	114
	Wallplaster	163
	Ceiling plaster	173
	Staircases	18
	Fireplaces	26
	Damp walls	502
	Accumulations or deposits	121
	Noise	2
Public Health Act 1961		
Section 22.	Choked drains cleansed	434
Sheffield Corporation Act 1937		
Section 52.	Choked drains cleansed (24 hours' notice)	142

Canal Boats—

Visits paid to canal	70
Inspections of canal boats	6
Canal boats registered in the City	—
Persons found living on board—	
Males over 15 years of age	7
Females over 15 years of age	—
Children between 5 and 15 years of age	—
Children under 5 years of age	—
Average number of occupants per boat	1·17
Infringements found	1
Informal notice to owners	1
Informal notice complied with	—
Notices served	—
Notices complied with	—
Legal proceedings instituted	—
Cases of infectious diseases on board	—
No. of boats detained for cleansing	—

Houses in Multiple Occupation

Total visits	1,397	(19,483)
Management Orders made (Section 12)	2	(120)
Notices served requiring works (Section 15)	37	(471)
Notices served requiring fire escape (Section 16)	24	(398)
Directions made to limit occupancy (Section 19)	24	(153)
Section 15 notices complied with	38	(240)
Section 16 notices complied with	44	(202)
Works in progress (Sections 15 and 16)	74	—
Houses ceased to be in multi-occupation after formal action	13	(183)
Houses where legal proceedings taken against owner	1	(19)

(Figures in brackets are totals since the Housing Act 1961 came into force)

Offices Shops and Railway Premises Act, 1963

The particulars required under Section 60, for the year ended 31st December, 1970, are as follows:—

Class of Premises	*Number of premises registered during the year*	*Total number of registered premises at end of year*	*Number of registered premises receiving a general inspection during the year*
REGISTRATIONS AND GENERAL INSPECTIONS			
Offices	155	1,862	825
Retail shops	143	3,234	1,510
Wholesale shops, warehouses	20	355	83
Catering establishments open to the public, canteens	22	512	201
Fuel storage depots	—	2	—
TOTALS	340	5,965	2,619

Number of visits of all kinds by inspectors to registered premises ... 6,214

	Class of Workplace	*No. of persons employed*
ANALYSIS BY WORKPLACE OF PERSONS EMPLOYED IN REGISTERED PREMISES	Offices	21,245
	Retail shops	18,111
	Wholesale departments, warehouses ...	3,358
	Catering establishments open to the public	5,051
	Canteens	596
	Fuel storage depots	26
	TOTAL	48,387
	TOTAL MALES	19,241
	TOTAL FEMALES	29.146

EXEMPTIONS: No applications for exemption were made

PROSECUTIONS: Number of prosecutions instituted during the period — 1 premises; 1 information laid but case dismissed

Number of complaints (or summary applications) made under Section 22 ... ... — Nil

Number of Interim Orders granted ... ... — Nil

STAFF: Number of inspectors appointed under Section 52(1) or (5) of the Act ... ... — 34 (29 public health inspectors and 5 technical assistants)

Number of other staff employed for most of their time on work in connection with the Act — 2 clerks and 7 shorthand typists who are employed for approximately 10% of their time on work connected with the Act

Reported Accidents

Workplace	*Numbers Reported*		*Total No. investigated*	*Action Recommended*			
	Fatal	*Non Fatal*		*Prosecution*	*Formal warning*	*Informal advice*	*No. action*
Offices	—	36	20	—	—	2	18
Retail shops ...	—	76	34	1	—	3	30
Wholesale shops, warehouses ...	—	24	11	—	—	1	10
Catering establishments open to the public, canteens ...	—	44	29	—	—	7	22
Fuel storage depots ...	—	—	—	—	—	—	—
TOTALS ...	—	180	94	1	—	13	80

Analysis of Reported Accidents

Cause of Accident	*Offices*	*Retail Shops*	*Wholesale Warehouses*	*Catering establishments open to public, canteens*	*Fuel storage depots*
Machinery	2	8	1	2	—
Transport	1	—	5	1	—
Falls of persons	15	24	3	18	—
Stepping on or striking against object or person	3	14	—	4	—
Handling	6	20	13	13	—
Struck by falling object	2	—	—	2	—
Fires and explosions	—	1	—	—	—
Electricity	—	—	—	—	—
Use of hand tools	—	6	—	—	—
Not otherwise specified	7	3	2	4	—
TOTALS	36	76	24	44	—

INSPECTIONS UNDER THE FACTORIES ACT, 1961

1. Inspections for purposes of provision as to health.

Premises	*Number on Register*	*Number of*		
		Inspections	*Written Notices*	*Occupiers Prosecuted*
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by local authorities	92	11	4	—
(ii) Factories not included in (i) in which Section 7 is enforced by local authority	2,548	452	66	—
(iii) Other premises in which Section 7 is enforced by the local authority (excluding outworkers' premises) ...	142	6	—	—
TOTALS	2,782	469	70	—

2. Cases in which defects were found.

Particulars	*Number of cases in which defects were found*				*Number of cases in which prosecutions were instituted*
	Found	*Remedied*	*Referred* *To H.M. Inspector*	*Referred* *By H.M. Inspector*	
Want of cleanliness (S.1)	1	—	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)—					
(*a*) Insufficient	—	4	—	—	—
(*b*) Unsuitable or defective	95	39	3	10	—
(*c*) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to outwork)	—	—	—	—	—
TOTALS	96	43	3	10	—

Food Hygiene (General) Regulations, 1960

Type of Food Premises	*No. of premises* (i)	*No. of premises fitted to comply with Regulation* 16 (ii)	*No. of premises to which Regulation* 19 *applies* (iii)	*No. of premises fitted to comply with Regulation* 19 (iv)
1. Restaurants, cafes and snack bars	269	269	269	269
2. Canteens (factories, offices, shops)	262	262	262	262
3. Hotels	28	28	28	28
4. School canteens	160	160	160	160
5. Hostels	47	47	47	47
6. Boarding houses	23	21	23	23
7. Institutions	33	33	33	33
8. Public houses	524	518	524	524
9. Clubs	134	133	134	134
10. Food factories	168	166	168	167
11. Butchers' shops	427	383	427	427
12. Wet fish shops	85	80	85	85
13. Fried fish shops	237	209	237	227
14. Other food shops (wholesale and retail)	1,966	698	1,869	1,842
TOTALS	4,363	4,007	4,266	4,228

Air Pollution

SOLID MATTER DEPOSITED AT COLLECTING STATIONS DURING THE YEAR 1970

(*Milligrammes per square metre per day*)

Month	*Attercliffe*	*Firth Park*	*Fulwood*	*Sewage Works*
January	451	192	251	277
February	316	90	199	288
March	337	288	191	249
April	342	183	229	411
May	223	141	N.R.	N.R.
June	252	160	119	N.R.
July	213	134	99	N.R.
August	300	257	212	286
September	208	135	176	187
October	258	109	168	390
November	340	232	184	274
December	263	116	103	200
TOTAL	3,503	2,037	1,931	2,562
AVERAGE	292	170	176	285

Monthly Averages of SO_2 (Volumetric) at Ten Stations during the Year 1970

(*Microgrammes per cubic metre*)

Month	*Surrey Street*	*Park County*	*Newhall Road*	*Ellesmere Road*	*Pye Bank C. S.*	*St. Stephens*	*Milton Street*	*Sharrow Lane*	*Manor Clinic*	*Turton Platts Wincobank*
January	247	194	345	261	242	219	239	165	130	308
February...	234	189	285	204	212	170	266	167	167	219
March	214	211	262	232	223	171	258	162	176	205
April	141	108	164	133	147	110	168	98	116	174
May	143	135	167	154	160	133	174	128	132	152
June	128	98	156	145	164	137	154	104	115	152
July	72	69	126	107	101	63	79	51	69	88
August	121	97	154	124	142	108	134	65	108	118
September	90	113	141	148	140	102	115	57	96	107
October	143	186	200	166	177	127	164	62	115	161
November	164	194	228	165	185	141	214	75	129	166
December	232	202	282	197	212	149	273	87	164	232
TOTALS	1,929	1,796	2,610	2,036	2,105	1,630	2,238	1,221	1,517	2,082
AVERAGE	161	150	218	170	175	136	187	102	126	174

Monthly Averages of Smoke (Volumetric) at Ten Stations During the Year 1970

(*Microgrammes per cubic metre*)

Month	*Surrey Street*	*Park County*	*Newhall Road*	*Ellesmere Road*	*Pye Bank C.S.*	*St. Stephens*	*Milton Street*	*Sharrow Lane*	*Manor Clinic*	*Turton Platts Wincobank*
January	92	97	181	172	115	82	86	66	67	132
February...	65	70	117	144	63	53	78	49	68	106
March	76	74	104	159	71	61	65	49	67	101
April	47	47	56	87	47	14	40	29	42	64
May	46	50	51	70	53	N.R.	51	37	47	48
June	34	32	35	36	30	25	31	25	31	47
July	19	21	24	30	14	10	17	14	16	28
August	44	47	101	56	21	34	44	37	41	57
September	38	45	122	60	42	31	42	32	39	65
October	67	59	150	96	59	48	68	52	55	101
November	63	71	178	107	70	50	83	55	56	95
December	81	78	197	139	76	54	92	51	77	143
TOTALS	672	691	1,316	1,156	661	462	697	496	606	987
AVERAGE ...	56	58	110	96	55	42	58	41	50	82

Smoke and Sulphur Determination by the Volumetric Method at Ten Sheffield Stations
Six Years 1965 - 1970
(*Average per year—Microgrammes per cubic metre*)

	Year	*Surrey Street*	*Park County*	*Newhall Road*	*Ellesmere Road*	*Pye Bank*	*St. Stephens*	*Milton Street*	*Sharrow Lane*	*Manor Clinic*	*Turton Platts*
SMOKE	1965	77	92	186	206	106	100	116	178	121	141
	1966	68	99	154	166	88	82	101	122	84	120
	1967	71	95	141	137	66	55	105	95	62	104
	1968	69	106	138	149	75	61	79	74	67	101
	1969	56	93	123	134	69	57	58	47	57	94
	1970	56	58	110	96	55	42	58	41	50	82
SULPHUR	1965	178	145	221	158	171	107	184	87	117	177
	1966	145	121	189	146	143	86	160	77	90	175
	1967	167	152	216	148	140	120	173	85	96	178
	1968	181	190	226	175	135	122	166	96	100	196
	1969	172	184	239	175	159	123	166	99	124	192
	1970	161	150	218	170	175	136	187	102	126	174

Sulphur Determination by the Lead Peroxide Method at Stations during the Year 1970

(*Milligrammes per 100 square centimetres per day*)

Month	*Attercliffe*	*Firth Park*	*Sewage Works*	*Tinsley*	*Weston Park*	*Wincobank*
January	5·06	3·71	2·93	10·20	2·21	2·91
February	4·27	2·46	2·60	3·75	2·15	2·20
March	5·11	1·79	2·33	2·79	3·25	2·09
April	3·41	1·89	2·78	4·88	3·51	2·47
May	3·03	1·66	1·93	1·96	1·55	1·56
June	3·04	2·15	2·15	2·12	1·63	1·83
July	2·14	1·50	1·57	2·28	1·10	1·02
August	2·22	1·57	1·56	4·43	1·49	0·72
September	0·81	0·60	0·97	0·83	0·51	0·68
October	4·00	2·19	3·10	4·39	1·63	2·05
November	4·73	2·46	2·56	11·06	1·13	2·15
December	4·32	2·26	1·89	9·91	1·94	1·62
TOTALS	42·14	24·24	26·37	58·60	22·10	21·30
AVERAGES	3·51	2·02	2·20	4·88	1·84	1·78

Sulphur Determination by the Lead Peroxide Method at Three Stations for the five years 1966—1970

Year	(*Milligrammes per* 100 *square centimetres per day*)		
	Attercliffe	*Firth Park*	*Weston Park*
1966	3·5	2·4	1·8
1967	3·3	2·2	1·7
1968	3·1	2·4	1·7
1969	3·3	2·1	1·8
1970	3·5	2·0	1·8

Solid Matter Deposited at three Collecting Stations during the five years 1966—1970

Year	(*in Milligrammes per square centimetre*)					
	Attercliffe		*Firth Park*		*Fulwood*	
	Average Deposit Per Month	*Highest Monthly Deposit*	*Average Deposit Per Month*	*Highest Monthly Deposit*	*Average Deposit Per Month*	*Highest Monthly Deposit*
1966	261	388	181	307	145	209
1967	233	297	156	249	149	257
1968	238	312	181	304	157	211
1969	259	355	173	274	155	299
1970	292	451	170	288	176	251

Meat Inspection

CARCASES AND OFFAL INSPECTED AND CONDEMNED IN THE CITY DURING THE YEAR, 1970

Animals slaughtered and Disease Conditions found	*Condemnations*			
	Carcases		*Offal*	
	Total	*Partial*	*Total*	*Partial*
Adult Cattle				
Number slaughtered 54,487				
Actinobacillosis (mycosis)	—	1	—	121
Bruising	1	51	1	—
Cysticercosis (C. bovis)				
(*a*) Rejected	2	—	2	136
(*b*) Refrigerated	136	—	—	136
Echinococcosis	—	—	—	424
Emaciation	—	—	—	—
Fascioliasis (fluke)	—	—	—	17,706
Hepatic abscess	—	1	—	3,412
Johne's disease	3	3	3	48
Mastitis	1	4	1	2,609
Peritonitis	4	10	4	1,277
Pneumonia and/or pleurisy	1	6	1	4,337
Septicaemic conditions/fever	3	—	3	—
Telangiectasis	—	—	—	1,261
Tuberculosis	—	—	—	1
Tumours	2	—	2	2
Other conditions	41	149	41	2,947
Calves				
Number slaughtered 630				
Bruising	—	—	—	—
Emaciation	—	—	—	—
Immaturity	—	—	—	—
Joint-ill or navel-ill	—	—	—	—
Septicaemic conditions/fever	2	—	2	—
Tuberculosis	—	—	—	—
Other conditions	7	5	7	5
Pigs				
Number slaughtered 128,044				
Abscess	68	773	68	62
Arthritis	48	316	48	—
Ascariasis (milk spot)	—	—	—	8,968
Bruising	6	85	6	20
Echinococcosis	—	—	—	6
Emaciation	3	—	3	—
Jaundice	3	—	3	—
Pneumonia	30	338	30	26,569
Pyaemia	63	—	63	—
Septicaemic conditions/fever	12	—	12	—
Swine erysipelas	5	8	5	—
Tuberculosis	3	—	3	425
Tumours	1	1	1	1
Other conditions	68	249	68	8,283
Sheep				
Number slaughtered 118,754				
Abscess	2	44	2	2
Arthritis	5	159	5	1
Bruising	1	31	1	3
Cysticercus ovis	1	1	1	393
Echinococcosis	—	—	—	1,980
Emaciation	—	—	—	—
Fascioliasis (fluke)	—	—	—	17,902
Jaundice	—	—	—	—
Pneumonia and /or pleurisy	31	118	31	5,774
Pyaemia	5	—	5	—
Septicaemic conditions/fever	1	—	1	—
Tumours	6	1	6	—
Tuberculosis	1	—	1	—
Other conditions	135	42	135	4,403

Animals Slaughtered and Inspected in the City in the Year, 1970

Where Slaughtered	*Oxen*	*Calves*	*Sheep and Lambs*	*Goats*	*Pigs*	*Horses*	*Total*
Abattoir main slaughterhalls	53,625	630	107,381	9	128,043	—	289,688
do. (Jewish method) ...	493	—	1,774	—	—	—	2,267
do. (Mohammedan method)	2	—	9,151	—	—	—	9,153
Isolation slaughterhall	82	—	1	—	1	—	84
Totals (abattoir) ...	54,202	630	118,307	9	128,044	—	301,192
Totals (private slaughterhouses) ...	285	—	447	—	—	71	803
TOTALS ...	54,487	630	118,754	9	128,044	71	301,995

Food Condemned as Unfit for Human Consumption During the Year, 1970

Description	*Quantity*	*Tons*	*Cwts.*	*Qrs.*	*Lbs.*	*Description*	*Quantity*	*Tons*	*Cwts.*	*Qrs.*	*Lbs.*
Canned Goods	36,831	—	—	—	—	Meat paste	18 jars	—	—	—	—
Bacon and ham	—	—	6	3	7	Nuts	—	—	—	—	7
Bread, cakes and pastry ...	—	—	7	1	16	Pickles and sauces ...	510 jars	—	—	—	—
Butter	—	—	3	3	21	Poultry and game	—	2	3	2	12
Cereals	—	—	1	—	—	Preserves	33 jars	—	—	—	—
Cheese	—	—	4	3	18	Rabbits	—	—	3	1	18
Coconut	—	—	4	1	24	Rice	—	—	—	—	10
Cream	—	—	—	—	3	Salt	—	—	—	1	7
Fish	—	6	—	1	2	Shellfish	86 jars	1	1	1	1
Flour & flour confectionery	—	1	3	—	7	Soft drinks	542 galls.	—	—	—	—
Fruit	—	25	13	—	12	Soup	—	—	—	—	14
Fruit (dried)	—	—	—	1	21	Stuffing	—	—	—	—	22
Herbs	—	—	—	—	10	Sugar	—	—	—	3	5
Lard	—	—	—	3	—	Sweet confection	90 galls.	—	—	—	—
Margarine	—	—	2	1	6	Vegetables	—	20	1	1	1
Meat and meat products ...	—	5	16	3	19						

The total weight of food condemned and destroyed was 89 tons 5 cwts. 19 lbs.

DETAILS OF CANNED GOODS DESTROYED

Commodity	*Number of Cans*
Fish	4,827
Fruit	15,682
Meat	5,426
Milk	496
Soup	1,613
Vegetables	6,633
Miscellaneous	2,154
Total	36,831

Total Weight of all Meat Found to be Unfit for Human Consumption in the Animals Slaughtered and Inspected in the Year, 1970

	MEAT								*OFFALS*											
	Affected with Tuberculosis				*Affected with other diseases*				*Affected with Tuberculosis*				*Affected with other diseases*				*TOTALS*			
	T	*C*	*Q*	*L*	*T*	*C*	*Q*	*L*	*T*	*C*	*Q*	*L*	*T*	*C*	*Q*	*L*	*T*	*C*	*Q*	*L*
Cattle	—	—	—	—	13	13	—	17	—	—	—	10	160	19	1	4	174	12	2	3
Calves	—	—	—	—	—	3	2	23	—	—	—	—	—	2	2	21	—	6	1	16
Sheep	—	—	1	22	4	4	2	3	—	—	—	23	33	17	2	18	38	2	3	10
Pigs	—	3	1	18	19	14	—	17	1	10	3	25	71	15	2	16	93	4	—	20
Horses	—	—	—	—	—	—	1	12	—	—	—	—	—	6	2	17	—	7	—	1
TOTALS	—	3	3	12	37	15	3	16	1	11	1	2	267	1	3	20	306	12	3	22

GENERAL

Meteorology during 1970 — Records taken at Weston Park

(430 feet above sea level)

Month	*Highest Maximum Temperature*	*Lowest Minimum Temperature*	*Mean Temperature*	*Lowest Grass Minimum*	*Rain Inches*	*Rain Days*	*Sunshine hours*	*Snow Lying Days*
January. ...	49·8	22·4	38·7	6·8	3·72	23	36·8	3
February	50·8	23·0	36·2	13·5	4·10	21	88·5	14
March ...	54·1	20·7	38·7	18·8	2·17	23	114·6	8
April ...	63·9	28·2	44·4	23·4	4·19	21	134·3	2
May ...	73·3	40·0	55·2	32·8	0·67	8	160·2	—
June ...	82·6	45·3	61·7	38·6	0·95	6	238·9	—
July ...	86·5	47·2	59·8	42·8	1·54	13	153·2	—
August ...	80·1	46·9	61·3	39·1	1·68	11	147·6	—
September	77·6	45·6	58·5	34·2	1·68	10	122·6	—
October ...	66·2	38·2	51·5	27·5	1·89	15	101·0	—
November	60·4	30·7	45·1	20·0	5·57	27	48·4	—
December	52·8	28·5	39·9	23·0	1·59	18	45·7	3
					30·94	196	1,391·8	30

Mean daily maximum temperature	55·2	*Extremes for* 1970
Mean daily minimum temperature	43·4	Hottest day, 7th July, 86·5°F.
Mean of max. & min. temperatures	49·3	Wettest day, 12th April, 1·94 ins.
		Sunniest day, 18th June, 15·2 hrs.

The year has been notable for its sunshine and droughts. It has been the sunniest year since 1959, and the driest since 1964. Hours of bright sunshine were 10% above the long term average. However, although the year was drier than usual, the number of rain days was higher and particularly concentrated in the first four months, which registered 45% of the year's precipitation.

The 31 days without rain from May 22nd to June 21st was the the third longest drought at Weston Park since recording began in 1883. The period was coincident with the 82 days from May 11th, the longest spell since 1933 over which bright sunshine was registered on successive days. July 7th was the hottest day for 17 years.

Notification of Arrival of Immigrants.—Under the scheme introduced in 1965, Medical Officers of Health are notified by the port of entry of immigrants travelling to their areas. The table below shows details of notifications received and also the number of first successful visits made by the health visitor. The discrepancies reflect the difficulties encountered in tracing many immigrants often caused by vagueness and inaccuracies in the given addresses. In addition, certain areas of the City appear to serve the purpose of a transit camp and immigrants have often moved on before the health visitor arrives. Many women and children are also admitted without entry certificates so that information regarding them is not received in the area for which they are bound.

Arrivals During 1970

Country where passport was issued	*Number of advice slips received during quarters ended*					*No. of successful visits*
	31st March	*30th June*	*30th September*	*31st December*	*Total*	
Commonwealth Countries						
Caribbean ...	9	19	12	13	53	48
India	3	6	11	4	24	12
Pakistan	44	48	49	75	216	180
Other Asian ...	5	3	7	6	21	15
Africa	—	5	8	7	20	16
Other	9	6	8	—	23	22
Non-Commonwealth Countries						
European ...	—	2	2	3	7	5
Other	4	8	24	27	63	43
TOTALS	74	97	121	135	427	341